BASE PROJECT (VOL. 2)
NI LIFE AND TIMES (NILT) SURVEY AUTISM MODULE

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Helping the most vulnerable out of the poverty trap and reducing inequality: Policies, strategies, and services for individuals with Autism Spectrum Disorder, including intellectual and neurodevelopmental disabilities

(Working title: Benchmarking Autism Services Efficacy: BASE Project)

The BASE project aimed to provide baseline data for individuals with autism against which the effect of the Autism Act (NI) 2011 and associated Autism Spectrum Disorder (ASD) strategy can be measured. The five integrated Volumes of this project include

Volume 1: Comprehensive literature review using a systematic approach on outcomes for individuals with autism and the policies designed to improve those outcomes;

Volume 2: Northern Ireland Life and Times (NILT) Survey Autism module to survey public attitudes, knowledge and awareness of autism (n=1200); and

Volume 3. Secondary data analysis of all relevant NI governmental and related departmental etc. datasets focussing on education, employment and poverty;

Volume 4. Qualitative study using interviews and focus groups with individuals affected by autism and key professionals (e.g. educationists, employers, policy makers).

Volume 5. Final project report including process and outcome record of the BASE Project.

Data reported in this report (Volume 2) stem from the NILT Survey 2012: Autism module that surveyed public awareness of autism, public attitudes and knowledge. It should be read in conjunction with the Volumes 1-5.

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Abbreviations

ARK	Access Research Knowledge
ASD	Autism Spectrum Disorder
BASE	Benchmarking Autism Services Efficacy
CAPI	Computer Assisted Personal Interviewing
CASI	Computer Assisted Self Interviewing
NILT	Northern Ireland Life and Times
PAF	Postcode Address File
VLA	Value and Land Agency

BASE Project Vol. 2: NILTS Data analysis report

Executive Summary

The primary purpose of the BASE Project was to establish how to help individuals with Autism Spectrum Disorder out of poverty by promoting social inclusion. In order to achieve this, a range of methodologies were utilised that aimed to provide a baseline against which the effect of the Autism Act (NI) 2011 and the associated Autism Strategy (2013-2020) and Action Plans can be measured. The BASE Project is reported in 5 volumes. **Volume 2** reports on the analysis of the autism module of the Northern Ireland Life and Times (NILT) Survey that assessed public awareness, attitudes, knowledge, and projected behaviours with regard to individuals with ASD (all primary data and technical reports are available at www.ark.ac.uk/nilt/).

The NILT (2012) survey first ever autism module (n=1204) offered a baseline against which the impact of new autism legislation, policies, and strategies can be measured. Key findings:

- 82% awareness: Most people in Northern Ireland are aware of autism (n=989).
- 50% of all participants knew someone with autism personally (n=606).

Of those who were aware of autism:

- 19% had a close family member with autism (n=186), and/or a friends/acquaintance (n=296), and/or a work colleague (n=79) with autism.
- Autism awareness was particularly low for those from ethnic minorities and those with no internet access.
- Awareness of autism specific legislation was low (20%).
- Good levels of knowledge about autism strengths and challenges, slight tendency to overestimate the occurrence of special talents.
- Prevalence of autism was underestimated (62% thought autism was much less prevalent than official figures or did not know).
- Fairly accurate perception about causes of autism, i.e., not caused by poor parenting (84%).
- Strong support for evidence-based behavioural interventions (77%), but confusion about interventions that are not evidence-based (64%).

- Strong positive attitudes towards children and adults in social, educational and employment settings.
- Autism not viewed as necessarily ‘lifelong’ (58%); support for independent living (78%), e.g., driving a car (83%).
- More business for employers who employ people with autism (12%).
- Strong support for families caring rather than residential care (64%).
- Confusion about service responsibility: education (26%) health (33%) or both (28%).

Given increasing prevalence rates of ASD it is important that the general population is aware of autism and able to respond responsibly to the associated strengths and challenges. The results of the NILT (2012) first ever autism module show that the general public was well aware of autism, had positive attitudes, and was relatively knowledgeable about the issues faced by individuals and families affected directly. However, there was a lack of clarity about responsibility for effective service delivery. The NILT results show that a shift in focus is necessary from ‘awareness raising campaigns’ to an approach that delivers clarity with regard to intervention and accountability.

Introduction

The primary purpose of the overall BASE Project was to establish how to help individuals with Autism Spectrum Disorder (ASD) out of poverty by promoting social inclusion. In order to achieve this, a range of methodologies were utilised that aim to provide a baseline against which the effect of the Autism Act (NI) 2011 and the associated Autism Strategy (2013-2010) and Action Plans can be measured. This is Volume 2 of the BASE Project and reports on the analysis of the full autism module of the Northern Ireland Life and Times (NILT) conducted for the first time in 2012. The NILT Survey autism module assessed public awareness, attitudes, knowledge, and projected behaviours with regard to individuals with ASD.

The United Nations Convention on the Rights of Persons with Disabilities (UNCRPD, 2006) outlines how raising awareness of disabilities, such as autism, helps to promote social inclusion and emphasises that good levels of awareness in the general population play a key role in combating 'stereotypes, prejudices and harmful practices relating to persons with disabilities' (Article 8). Article 8 emphasises the importance of promoting 'awareness of the capabilities and contributions of persons with disabilities' and goes on to say that the state must play a role in promoting awareness and positive attitudes towards those with disabilities through campaigns and training programmes.

There has been considerable efforts and resources invested in awareness-raising campaigns in Northern Ireland and the rest of the world (Autism Speaks, 2013), because autism awareness and positive attitudes towards individuals with ASD is viewed as having the potential to help individuals with autism and their families out of the poverty trap through better and more effective social inclusion in mainstream society. Indeed, individuals with autism often report facing discrimination or bullying in the workplace which affects their ability to stay in employment and consequently their ability to become economically self-sufficient, i.e., supporting themselves and staying out of poverty. Only 15% of adults with ASD are in gainful employment (Bancroft et al., 2012). In addition, carers of individuals with autism often cite employers' attitudes as a barrier to their loved ones being able to maintain gainful employment (Forsythe et al., 2008).

The Northern Ireland Life and Times (NILT) survey is an annual survey, conducted by Access Research Knowledge (ARK). ARK is a Northern Ireland based collaboration between University of Ulster and Queen's University Belfast funded largely by the ESRC. 'Since 1998, the Northern

Ireland Life and Times Survey has put on record the attitudes, values and beliefs of the people in Northern Ireland to a wide range of social policy issues' (ARK, 2013). NILT has two parts: a main face-to-face interview using Computer Assisted Personal Interviewing (CAPI), and a self-completion section, usually administered using Computer Assisted Self Interviewing (CASI).

In each survey year, the questionnaire is made up of four or five modules, each focusing on a particular topic to reflect current social and public debates. In 2012, the modules focussed on (1) attitudes and knowledge of autism; (2) community relations, minority ethnic groups, migrant workers and asylum seekers; (3) lesbian, gay, bisexual and transgender issues; and (4) political attitudes. In addition, the NILT Survey always includes an extensive demographic section.

The underlying principle of the NILT Survey is public access and in order to achieve this tables of results, questionnaires, datasets and technical information are made fully available on the NILT website (www.ark.ac.uk/nilt) within six months from the end of fieldwork, thus providing timely and free public access to the primary data; for further information see Devine (2011). Researchers can contract to have relevant modules included in the NILT Survey. Prior to 2012, autism had not covered in the any of the previous NILT Surveys.

The autism module of the 2012 NILT Survey was developed by the BASE Project team, in close collaboration with the NILT team. It was conducted to provide a timely baseline measure of awareness and attitudes towards, and public knowledge of autism prior to the full implementation of the Autism Act (2011) and associated strategy and action plans. Findings reported here are expected to have a major impact on future autism related policies, strategies, and investment in poverty prevention measures. To-date, many of these measures and policies focussed on awareness-raising within the general public as well as potential employers. Therefore, it was important to get a measure of actual autism awareness, knowledge and attitudes in the general population.

Methodology

Research Participants

Initially, 2,126 people were invited to take part in the research; 1,204 adults aged 18 years from households in Northern Ireland took part, a response rate of 57%. Based on a small effect size achieved from logistic regression (odds ratio = 1.3), this sample size provided a power level of 98%.

A slightly greater proportion of females (55.3%; CI = 52.5% – 58.1%) than males (44.7%; CI = 41.9% - 47.5%) took part. The age breakdown was as follows: 18-24 years (8.6%; CI = 7.0% – 10.2%); 25-34 years (16.4%; CI = 14.3% – 18.5%); 35-44 years (18.0%; CI = 15.8% – 20.2%); 45-54 years (17.4%; CI =15.3% – 19.5%); 55-64 years (14.7 %; CI = 12.7% – 16.7%) and 65 years and over (25.0%; CI = 22.6%– 27.4%).

The participant data were weighted to allow for disproportionate household size. The weighted figures showed a similar gender split to the unweighted data for females (54.6%; CI = 51.5% - 57.7%) and males (45.4%; CI = 42.3% - 48.5%). The weighted age profile of the sample was: 18-24 years (11.1%; CI = 9.0% – 13.5%); 25-34 years (15.7%; CI = 13.7% – 18.1%); 35-44 years (18.5%; CI = 16.2% – 21.0%); 45-54 years (18.2%; CI =15.9% – 20.8%); 55-64 years (15.4%; CI = 13.3% – 17.9%) and 65 years and over (21.1%; CI = 18.8%– 23.5%).

The overall weighted profile of the sample was comparable to that of the Northern Ireland Census 2011and the 2011/12 Continuous Household Survey. Specific examples of how the NILT 2012 sample compares to the NI Census 2011 and the 2011/12 Continuous Household Survey in terms of composition can be found in the technical report located on the Access Research Knowledge (ARK) website (www.ark.ac.uk/nilt).

Research tool

The questions for the autism module (NILT, 2012) focused on autism awareness, knowledge of autism, and attitudes towards individuals with autism in a variety of contexts, including social, employment, education and housing (See appendix 1 for NILT ASD module questionnaire. The questions were developed by the BASE project team in close collaboration with the ARK team, thus drawing heavily on their extensive experience and expertise of NILT Survey question development. The questions were subsequently validated and agreed by service users, members of the ASD Strategy group, other stakeholders, and the funders project management team (OFMDFM).

Before being used in the main NILT Survey, the questions were pilot tested with 60 participants from the general public.

Demographic data on respondents including age and gender were collected as part of the overall NILT survey. Added value was achieved through the potential for future cross-referencing with

other NILT 2012 module data and data from previous NILT surveys; see ARK (2013) for full data sets, questionnaires, and technical reports for all modules.

Research Procedure

The Northern Ireland Life and Times (NILT) survey is an annual cross-sectional survey, recording public attitudes to key social and political issues in Northern Ireland. Founded in 1998, the survey uses a two-stage sampling methodology. First, a systematic random sample of addresses was selected from the Postcode Address File (PAF) database of addresses. Second, one adult was randomly selected from each household.

For participant selection, residential addresses were selected using systematic random sampling from the Postcode Address File (PAF), excluding private business addresses. Although it is not the only such data-base, the Postcode Address File provided the most up to date and complete list of residential addresses in Northern Ireland. This was the first time PAF was used for participant sampling; prior to this, the Valuation and Land Agency (VLA) data bank was used. The reason for this change was a change in the agencies that won the contract to carry out the survey. While previously the Central Survey Unit (CSU) of NISRA carried out the work, in 2012 *Perceptive Insight* won the contract. Non-governmental fieldwork agencies do not have access to governmental data-bases (such as VLA) and therefore have to use other sampling frames. For address-based sampling the most complete list is the PAF (ARK, personal communication).

In each household, the adult whose next birthday was in closest proximity to the interview date was selected as target participant. If the target respondent was not available, the interview was re-arranged to take place at a mutually agreed time.

Of the 2,350 addresses that were randomly selected, 224 proved to be vacant, derelict or commercial, leaving 2,126 eligible addresses. A total of 1,204 participants completed the main stage interviews, which equated to a response rate of 57%. Marginally fewer eligible respondents completed the self-completion questionnaire (N=1,201), resulting in a response rate of 56%.

Both computer assisted personal interviewing and a self-completion questionnaire were used in the survey, the latter of which was either completed by the respondent or interviewer on an iPad, or using the traditional pen and paper method if chosen by the respondent.

The NILT Survey was initially piloted on 60 respondents in August/September 2012. Findings of the pilot study were discussed by the whole NILT team together with the representatives from research teams responsible for each module. Very minor amendments were included in the autism questionnaire (Appendix 1).

Participants in the main survey received a letter in advance of the interview (Appendix 2) that explained the purpose of the study and provided contact details of the project management team. Main interviews were carried out with 1,204 participants from 1st October 2012 to 10th January 2013. Subsequently, extensive range of inter- and intra-variable logic checks were carried out on the data.

Analysis

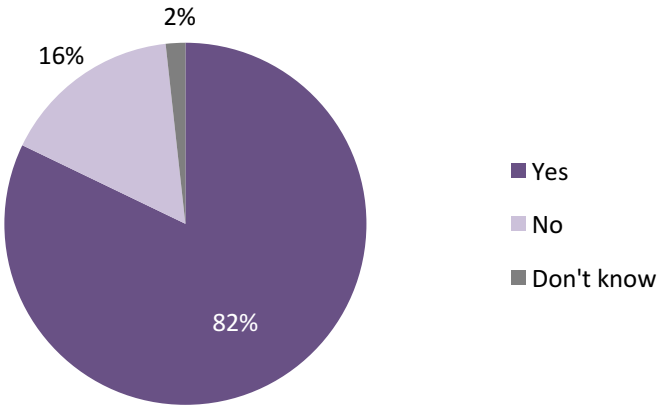
All calculations were based on unrounded data. With the exception of the word clouds in Figures 8 and 9, the figures presented below were weighted by household size.

Results

Awareness of autism

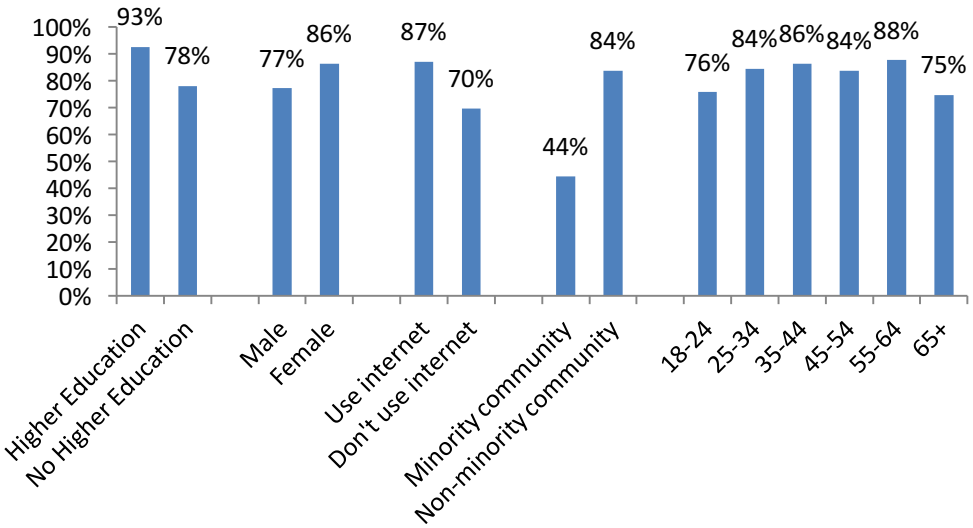
The majority of the sample (n=989; 82%) had heard of autism, Autism Spectrum Disorder, or Asperger's Syndrome, while 16% (n=194) had not heard of autism and 2% (n=21) were unsure (Figure 1; Appendix 3).

Figure 1: Awareness of autism, Autism Spectrum Disorder or Asperger's Syndrome



Ethnic-minority status, gender, internet use, and higher education predicted whether someone had heard of autism (Figure 2; Appendix 4). Respondents from ethic minorities were 12 times less likely to have heard of autism than other Northern Ireland residents. Participants who had completed higher education and those who used the internet (apart from work purposes) were 3 times more likely to have heard of autism than others. Women were almost twice as likely as males to know about autism and younger participants (18-24 years of age) and older participants (65+ years of age) were the least likely to have heard of autism compared to 25-64 year old participants. While awareness of autism was lowest amongst those aged 65 + relative to the other age groups, this difference was not statistically significant when ethnic-minority status, gender, internet use, and higher education were controlled for.

Figure 2: Awareness of autism by higher education, gender, internet use, ethnic-minority status, and age



Only those who had heard of ASD were included in the remainder of the ASD module (N=989).

Awareness of the Autism Act (Northern Ireland) 2011

The Autism Act (Northern Ireland) 2011 comprised three parts:

1. An amendment to Schedule 1 of the Disability Discrimination Act 1995 to also include within the defined areas of impairment:

    taking part in normal social interaction; or

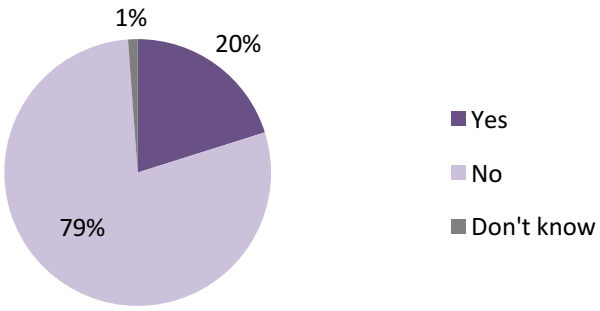
    forming social relationships

2. The requirement to develop a cross-departmental Autism Strategy. The Department of Health, Social Services and Public Safety (DHSSPS) was to lead on the preparation of this strategy with other departments required to cooperate in preparation and implementation. The strategy was to be published no less than two years after the Act was passed.

3. Supplementary, including the requirements that Health and Social Care Trusts return autism prevalence data within their areas to allow regular review and updating of the strategy (the Act states this must occur at intervals which do not exceed seven years).

Only one fifth (n=199; 20%) of participants had heard of the Autism Act NI 2011 (Figure 3; Appendix 5), while 79% (n=778) had not heard of the Act. Individuals who had a lot of contact with individuals with autism were 3 times more likely to have heard of the Act than those who had little contact with individuals on the spectrum. Participants who had no contact with anyone on the spectrum were 6.4 times less likely to have heard of the Act than participants with a lot of contact with individuals with ASD (Figure 4; Appendix 6).

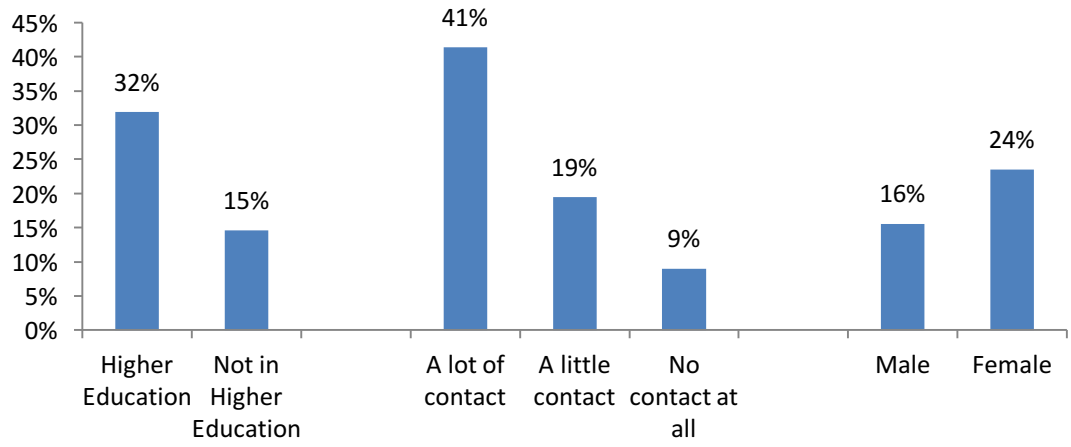
Figure 3: Awareness of the Autism Act (NI) 2011



Women were 1.5 times more likely to be familiar with the Autism Act than men, while participants with higher education were 2.5 times more likely to have heard of the Act than those

with lower levels of education. Having said this, overall awareness of the Autism Act of people who were aware of autism per se, was relatively low and therefore cannot be linked to generally high levels of autism awareness.

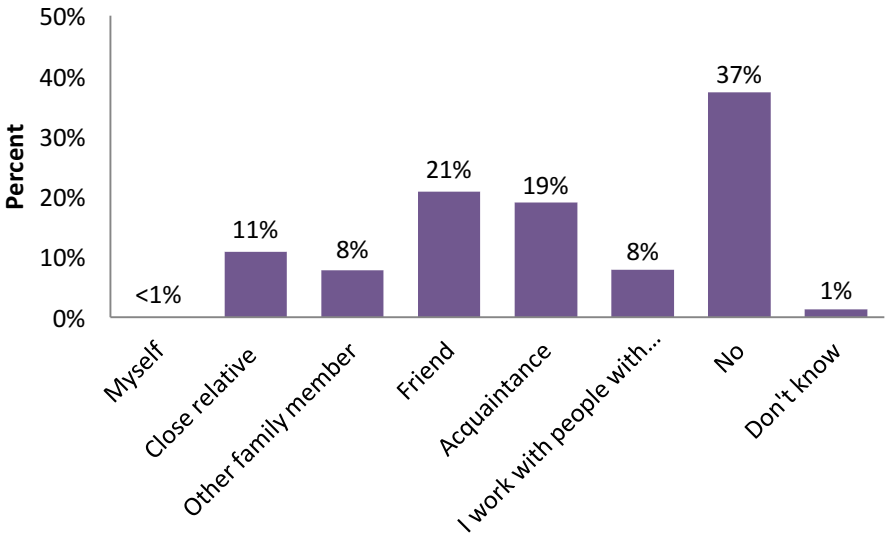
Figure 4: Awareness of the Autism Act (NI) by higher education, level of contact, and gender



Contact with people affected by autism

Half of all participants knew someone with autism (n=606); 383 participants who had heard about autism either did not know anyone with autism or were unsure (Figure 5; Appendices 7-14). Those who knew someone on the spectrum either had a friend with ASD (n=207; 21%), an acquaintance (n=189; 19%), a close relative (n=108; 11%), another family member (n=78; 8%), and/or they worked with someone on the spectrum (n=79; 8%).

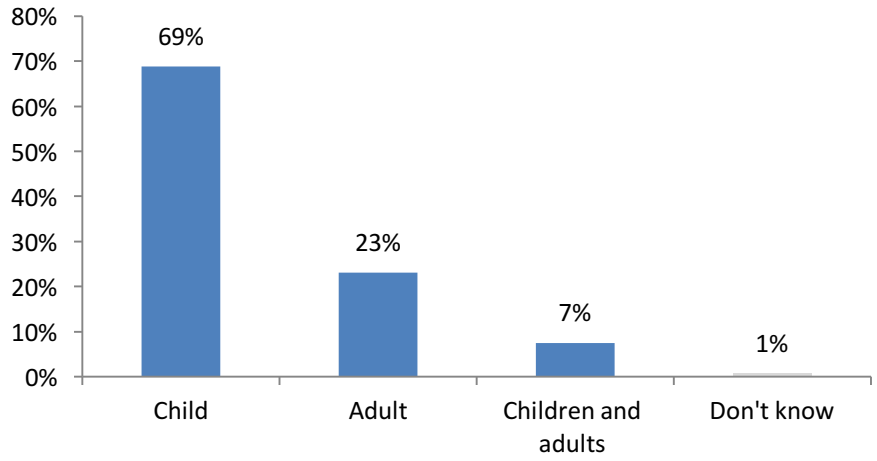
Figure 5: General public's contact with individuals affected by autism



Reasons for high autism awareness therefore are likely to be linked with high levels of individual experience rather than the Autism Act, half of the general population knew someone personally with autism and clearly others had heard about autism from those people.

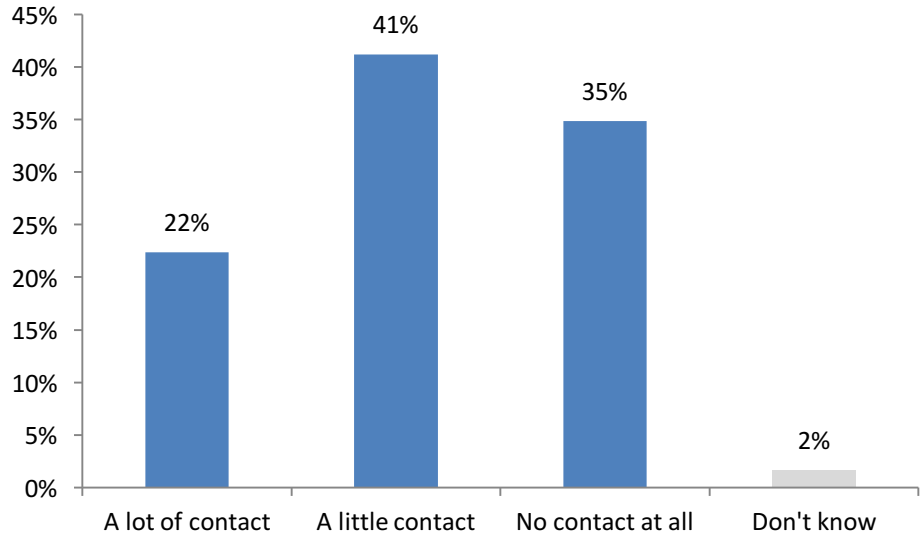
For most the participants who knew someone on the spectrum personally this was a child (n=362; 69%) although nearly a quarter of the participants knew an adult with ASD (n= 121; 23%); some knew both a child and an adult (n= 39; 7%) (Figure 6; Appendix 15) .

Figure 6: Contact with adults and children affected by autism



With regard to the level of contact that participants had with children or adults affected by autism (Figure 7; Appendix 16), over one fifth had a lot of contact (n=215; 22%) and around four in ten respondents had experienced a little contact (n=397; 41%).

Figure 7: Degree of contact with individuals affected by autism



Perceptions of Autism

Participants were asked to list the main strengths and challenges that they associated with autism. Responses to these questions are displayed in "word clouds", where the physical size of the text indicates how often that word was mentioned. Only words with a frequency of ten or more were included in the word clouds. This analysis was carried out on unweighted data, as the word cloud software did not have a weighting facility.

The strengths that respondents most frequently associated with autism reflected a relatively good understanding of strengths generally associated with autism (Figure 8). Being intelligent/very intelligent, having a special talent, creativity, good memory and being good at art, music or maths were identified academic strengths; non-academic strengths such as being loving, focused and determined were also identified. Some participants were unsure about identifying strengths of individuals autism or felt that there was variation in strengths amongst individuals with autism. Just over one third of respondents (n=326) did not answer this question.

Figure 8: Strengths that the general public associated with autism

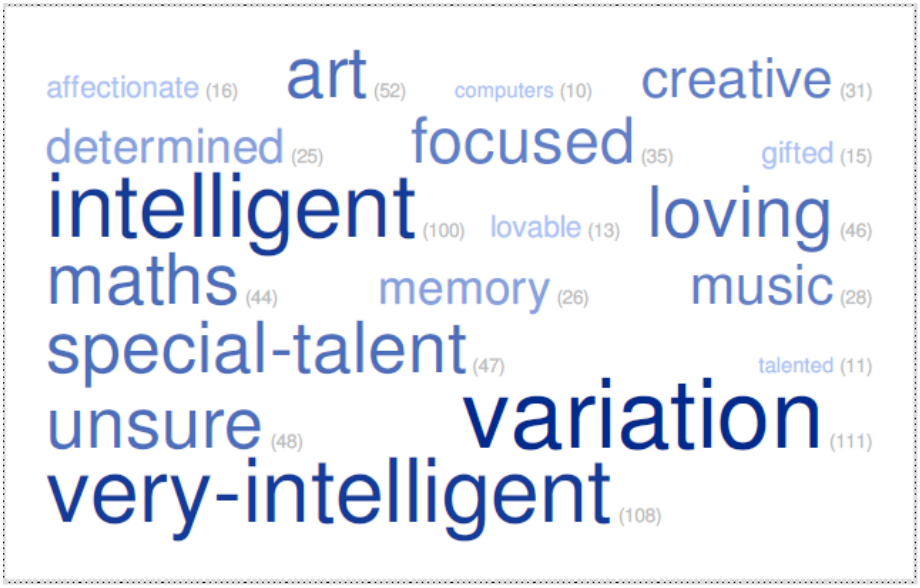


Figure 9 shows the challenges that respondents most frequently associated with autism. They identified many of the core features of autism including communication, social, behavioural and interaction difficulties. Respondents also identified that individuals with autism were likely to have difficulty in other areas of life, such as understanding other people's feelings, being understood, dealing with changes to routines, integrating into society, being independent, and concentration. A small number of participants mentioned that they thought there was variation between individuals with autism in terms of the challenges that they experienced. Only approximately one in eight respondents (13%) did not answer the question about challenges associated with autism.

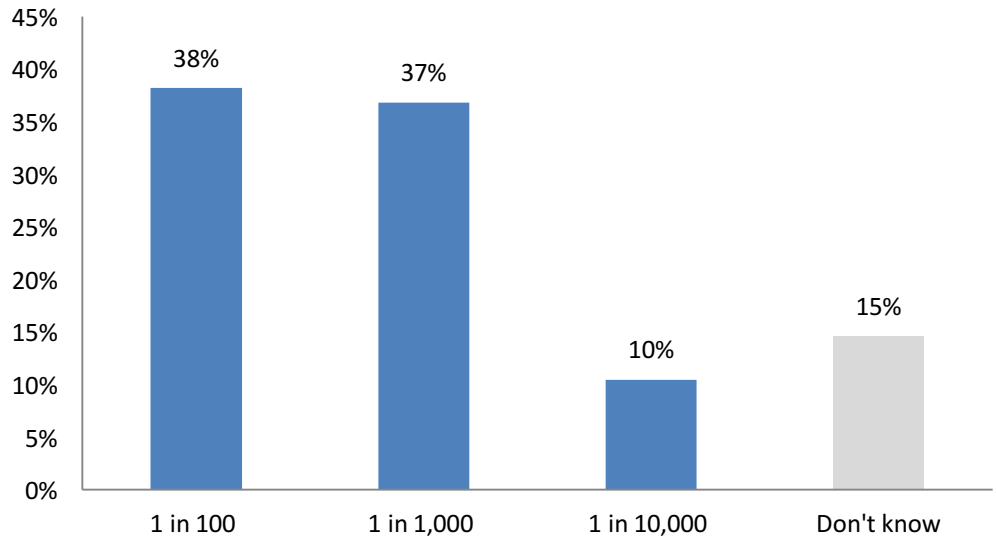
Figure 9: Challenges that the general public associated with autism

Autism prevalence

It is difficult to estimate prevalence rates for autism. Elsabbagh et al. (2012) carried out a systematic review in European and found estimated prevalence rates ranged between 1 in 333 to 1 in 86. More recently, the National Survey of Children's Health put the prevalence rate for autism in children as high as 1 in 50 (CDC, 2013). This rate is reflected in recent data from the Department of Education in Northern Ireland that show 2% of the school aged population to be on the spectrum (DE, personal communication). The secondary data analysis of the Millennium Cohort Study showed that by the time the children were 11 years of age, 3.5% of the parents had been told that their child had autism (see BASE Project report Volume 3). Clearly, prevalence has been growing. At the moment, internationally, the prevalence most widely reported is 1:88 for the entire age-range, i.e., children and adults (CDC, 2012).

Relatively consistent with the latest CDC (2012) prevalence estimates, just over one third of the respondents (n=372; 38%) thought that autism occurred in 1 out of every 100 people. Figure 10 (Appendix 17) shows that about half of the participants vastly underestimated prevalence rates at 1 in 1,000 (n=359; 37%) or 1 in 10,000 (n=102; 10%); while few or said that they did not know (n=142; 15%).

Figure 10: Knowledge of autism prevalence

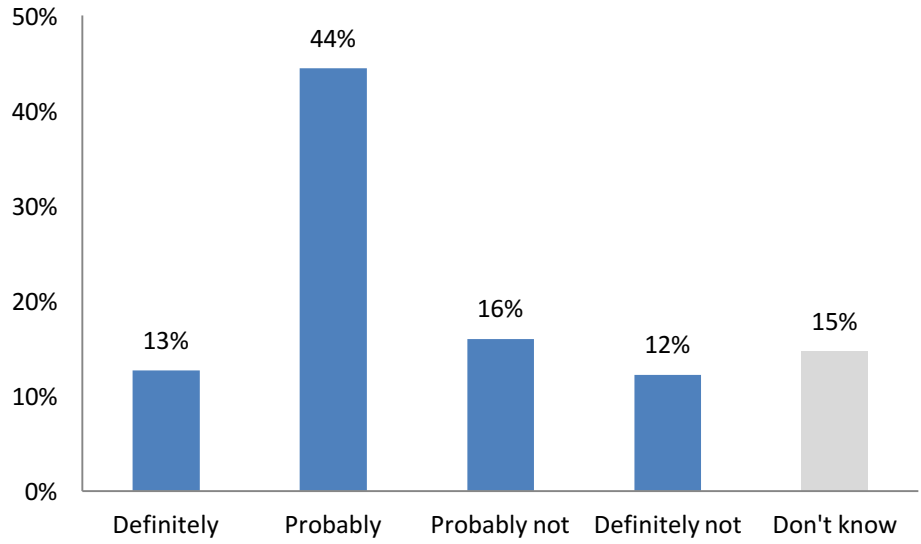


Causes of autism

The exact aetiology of autism is yet unknown. Neurodevelopmental, genetic, behavioural, environmental, and social factors are being explored. With regard to neurodevelopmental aetiology, MRI scans have shown qualitative differences between individuals with autism and individuals not diagnosed with autism (McAlonan et al., 2002, 2005). The shorthand term 'brain disorders' was used to capture the complexity of neurodevelopmental disorders in layperson's terms.

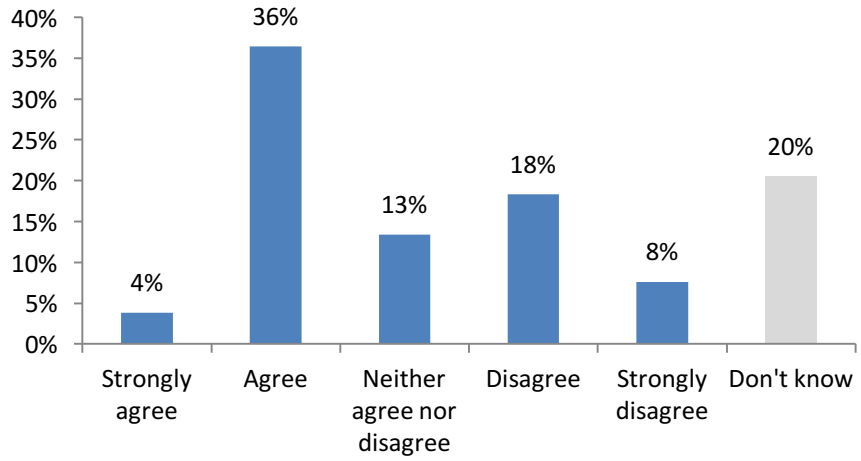
Well over half of respondents (n=555; 56%) thought that autism was definitely/probably a brain disorder (Figure 11; Appendix 18); 43% (n=274) disagreed and thought that autism was probably/definitely not a brain disorder; 15% (n=143) were unsure.

Figure 11: Views on whether or not autism was a brain disorder



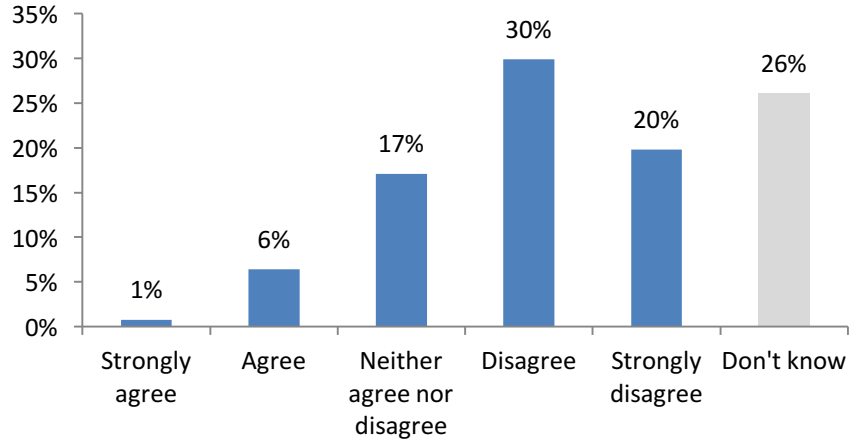
Twin, sibling, and other family studies suggest that autism may have a genetic root (Abrahams & Geschwind, 2008; Li, Zou, & Brown, 2012; Szatmari et al. 2007; Yang & Gill, 2007). Respondents expressed mixed views about the notion that autism could be inherited (Figure 12; Appendix 19). While four out of ten respondents (n=391; 40%) agreed/strongly agree with the idea that the cause of autism may be genetic, most disagreed/strongly disagreed (n=252; 26%) or were unsure (n=199; 20%).

Figure 12: Perception of causal link between genetic inheritance and autism



The widely reported link between the MMR vaccination and autism (Wakefield, 1999) has been largely discredited and the current evidence base does not support an association between the MMR vaccine and autism (Wilson, Mills, Ross, McGowan, & Jadad, 2003; Demicheli, Rivetti, Debalini, & Di Pietrantonj, 2012). Consistent with this evidence, few participants agreed/strongly agreed (n=70; 7%) with the view that autism is caused by vaccines like MMR (Figure 13; Appendix 20).

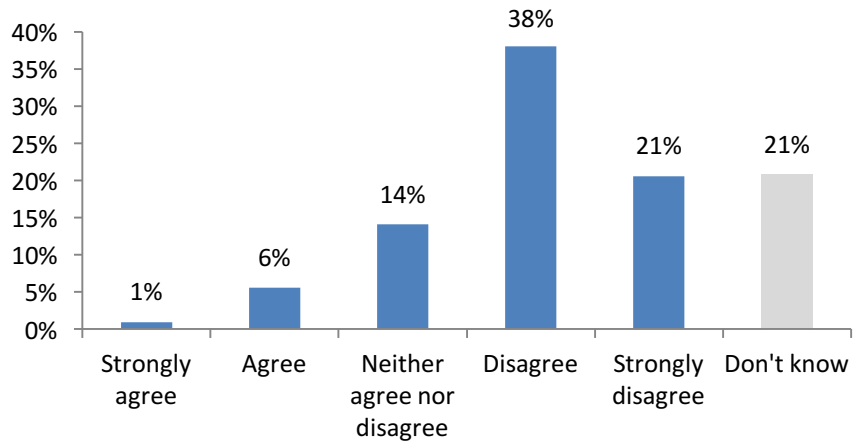
Figure 13: Perception of causal link between vaccines and autism



Environmental factors have been associated with the aetiology of autism, e.g., factors related to the prenatal environment may play a role in the development of autism (MRC, 2001). As Figure

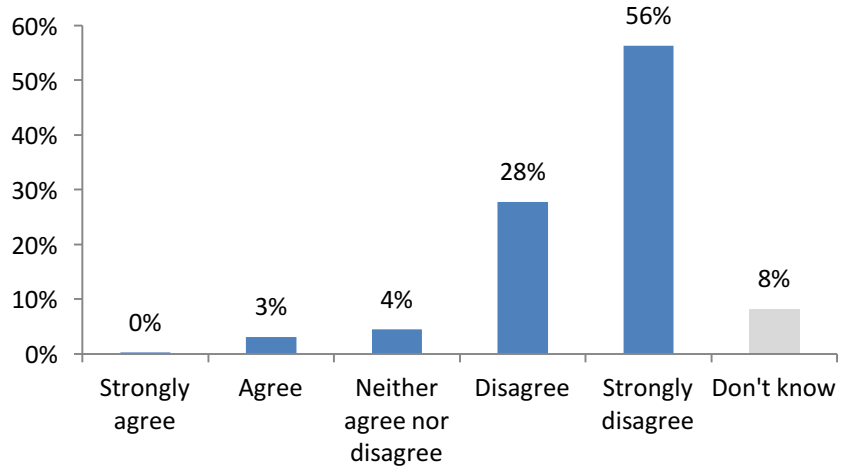
14 (Appendix 21) shows the majority of participants disagreed/strongly disagreed that the environment caused autism (n=569; 59%), and very few people agreed/strongly agreed that environmental factors played an important role in autism (n=63; 7%).

Figure 14: Perception of causal link between environmental and autism



Contrary to out-dated and discredited psychodynamic theories (Bettelheim, 1967), poor parenting is not associated with autism (Siller & Sigman, 2002; Yirmiya & Sigman, 2001). As Figure 15 (Appendix 22) shows, there was overwhelming agreement amongst the NILT Survey respondents that poor parenting does not cause autism (n=815; 84%); only 3% (n=33) believed that autism was associated with poor parenting.

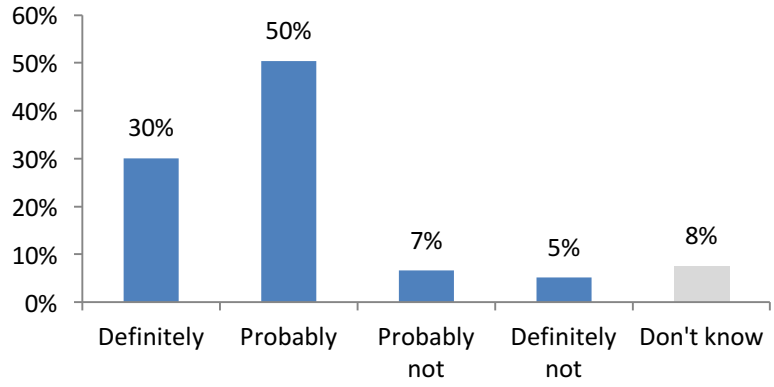
Figure 15: Perception of causal link of 'poor' parenting and autism



Co-occurring diagnoses

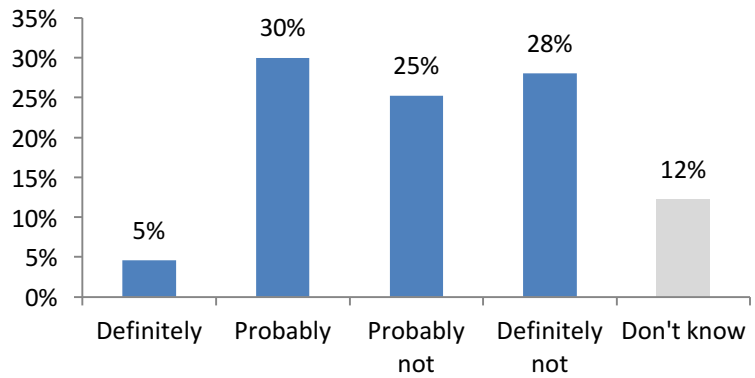
Autism frequently co-occurs with a range of diagnoses, including intellectual disabilities, mental illness, behavioural problems, and/or special or savant abilities. Autism is not a learning disability itself, however, autism and intellectual disability co-occur relatively frequently; reported rates for co-occurring learning disability in Europe vary from 15-55% (Elsabbagh et al., 2012). Most of the participants (n=782; 81%) thought that someone with autism definitely/probably has a learning disability, while 12% (n=115) thought that there definitely/probably was no such link; 8% (n=74) did not know (Figure 16; Appendix 23).

Figure 16: Perceived probability of co-occurrence of autism with learning disability



While autism is not a mental illness, mental health problems frequently co-occur with autism (MacNeil et al., 2009). In fact, the majority of adults with autism in Northern Ireland report having depression (57%) or anxiety (65%) (Stewart, 2008). Awareness that autism is not a mental illness was high (Figure 17; Appendix 24), i.e., 53% (n=517) thought that autism was definitely/probably not a mental illness; only 5% (n=44) of participants thought that individuals with autism had a mental illness; while 30% (n=291) thought that autism was probably related to mental health problems.

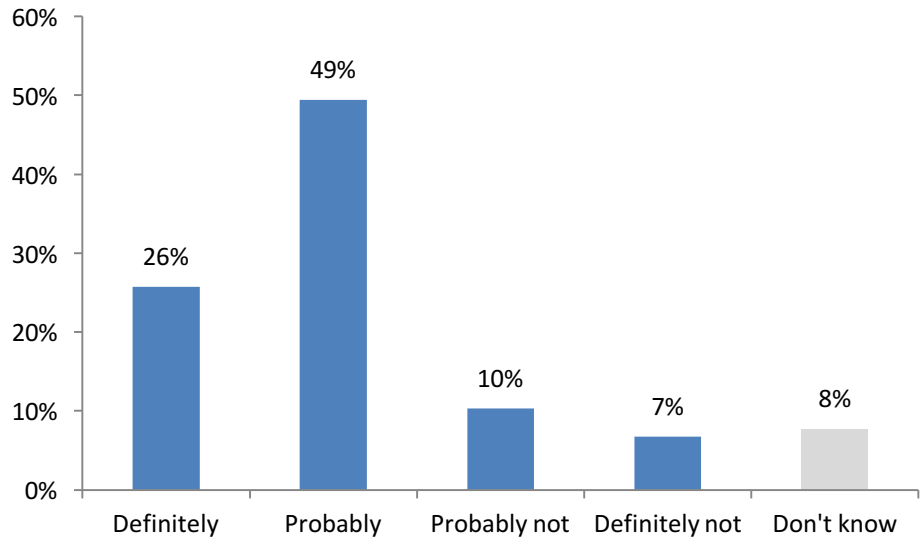
Figure 17: Perceived probability of co-occurrence of autism with mental illness



Autism diagnosis is based purely on behavioural observations, either by a caregiver or in a clinic setting. To-date, there is no medical test that reliably identifies individuals with ASD. ASD is diagnosed when persistent atypical social communication and repetitive behaviours are observed (APA, 2013). Behaviours commonly associated with autism include problems with social communication, self-absorbed, non-pretend play, and stereotypic, repetitive behaviours. Challenging behaviours, behaviour problems, or conduct disorders are not part of the autism diagnosis, although they are frequently co-occurring, especially when effective early behaviour analytic interventions are not available (Howlin, Goode, Hutton, & Rutter, 2004; Howlin, Savage, Moss, Tempier, & Rutter, 2014).

Over three quarters of the NILT sample (n=730; 75%) believed that autism was definitely/probably associated with problem behaviours (Figure 18; Appendix 25). Only 17% (n=166) of respondents thought that individuals affected by autism definitely/probably do not have behavioural problems.

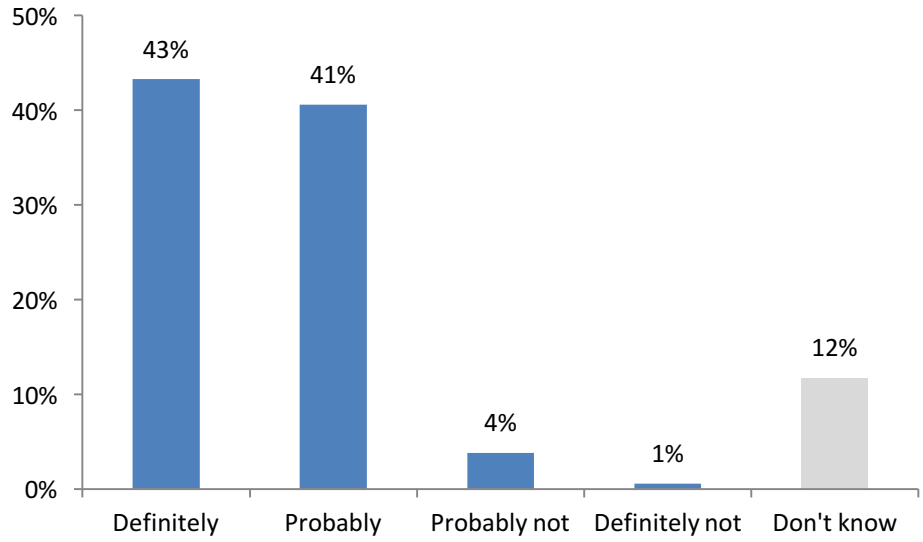
Figure 18: Perceived probability of co-occurrence of autism with behavioural problems



Contrary to popular belief, special abilities are relatively infrequent amongst individuals with autism. For example, Hermelin (2001) estimated that special abilities occur in 1 out of every 200 individuals with autism.

The majority of respondents (n=814; 84%) thought that individuals with autism definitely/probably have special abilities, e.g., in maths, music or art; while only 4% (n=43) thought that individuals with autism definitely/probably do not have special abilities. A substantial number of participants (n=114; 12%) were unsure (Figure 19; Appendix 26).

Figure 19: Perceived probability of co-occurrence of autism with special abilities



Treatment and support for autism

The debate about autism treatments or interventions can become heated and has even been referred to as the 'Autism Wars' (Freeman, 2003). While some hold the ideological view that autism should not be considered a condition that requires intervention (Mottron, 2011), othersfind that, with the appropriate evidence-based interventions, optimal outcomes can be achieved (Fein et al., 2013; Orinstein et al., 2014).

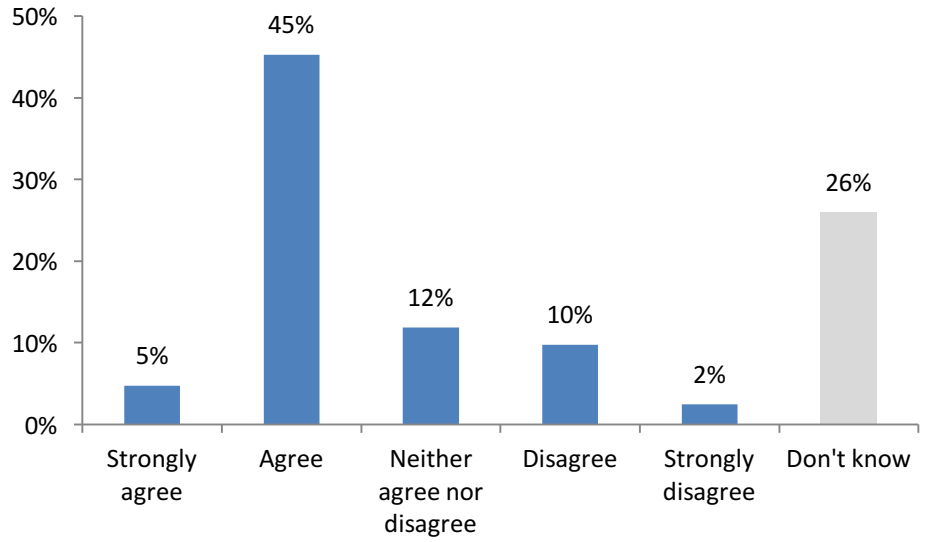
According to the National Autism Project (2009), a seminal large scale systematic review of interventions, there are ***established interventions***, that have sufficient evidence to confidently determine that they produce beneficial effects; all of which are based on applications of behaviour analysis; ***emerging interventions*** that boast one or more studies suggesting beneficial effects but require additional high quality studies to show this outcome consistently before firm conclusions can be drawn; most of which are based on applications of behaviour analysis; and an eclectic mix of ***unestablished methods***, that have little or no evidence, for which additional research may prove them to be effective, ineffective, or even harmful; and procedures for which there is *s*ufficient evidence to determine that they are ***ineffective or harmful***.

At present, there are no medications that target the core symptoms of autism (NAC, 2009), in fact, certain drugs are proven to cause harm (Maine Review, 2009). Warren et al. (2011) highlighted that even drugs that may be effective in treating challenging behaviours, reduce stereotypy

(repetitive movements), aggression, self-injury, or hyperactivity present with high incidence of harm. Still, medications are used frequently for individuals with autism.

In total, half of the participants (n=483; 50%) agreed/strongly agreed that drug treatments could be effective in helping people with autism, while the other half of respondents either disagreed, were neutral or unsure (Figure 20; Appendix 27).

Figure 20: Perceived effectiveness of drugs for autism

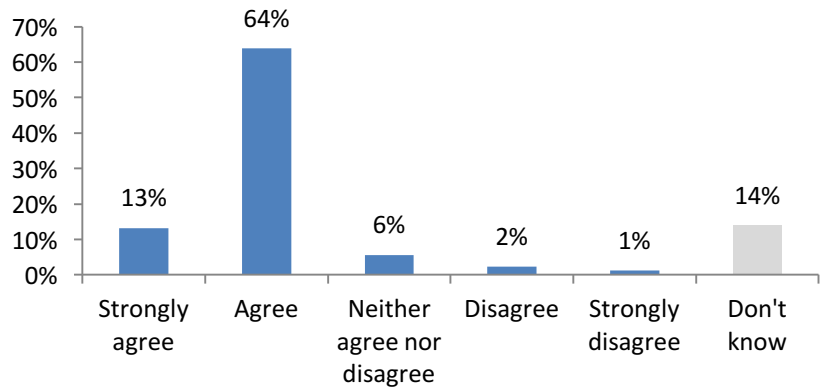


All of the *established* psychosocial interventions are based on the scientific discipline of applied behaviour analysis (ABA) (www.uk-sba.org; NAC, 2009), e.g. Comprehensive Behavioral Treatment for Young Children (also known as Early Intensive Behavioural Intervention, EIBI); Joint Attention Intervention; Naturalistic Teaching Strategies; Pivotal Response Treatment. Many of the *emerging* interventions also are based on ABA, such as Picture Exchange Communication System (PECS); Social Skills Package.

In fact in the USA, Surgeon General (1999) has endorsed behaviour analysis as the basis of autism interventions some 15 years ago, and more recently, the Office of Personnel Management (OPM, 2013) has classed these kinds of interventions not only as educationally but also as 'medically necessary'.

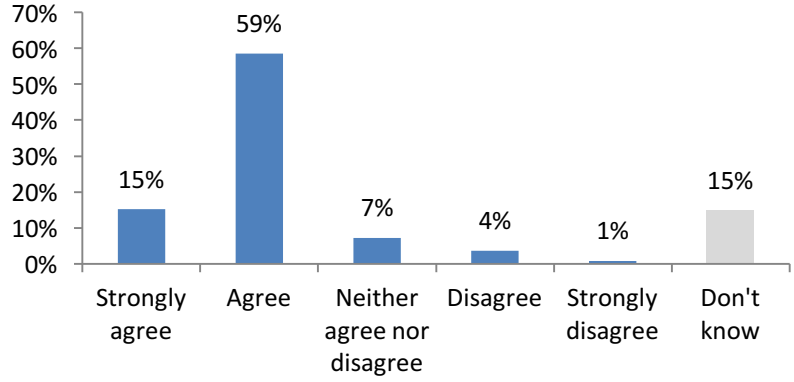
Parents and caregivers in Northern Ireland, and in the Republic of Ireland have expressed the need for behaviour analysis-based interventions for their children (Keenan et al., 2010). In line with these findings, participants in the NILT Survey supported behavioural interventions, with over three quarters (n=747; 77%) agreeing/strongly agreeing that behavioural interventions are effective (Figure 21; Appendix 28).

Figure 21: Perceived effectiveness of behavioural interventions for autism



Although there is no scientific evidence of effectiveness of eclectic interventions, on the contrary, they have been shown to be less effective than applied behaviour analytic interventions (Howard et al. 2005), eclecticism is still widely supported by education, health and social care agencies in Northern Ireland (Task Group Report on Autism, 2002). This was reflected in public opinion. In total, nearly three quarters (n=714; 74%) thought that other non-behavioural, non-pharmaceutical interventions could be effective (Figure 22; Appendix 29).

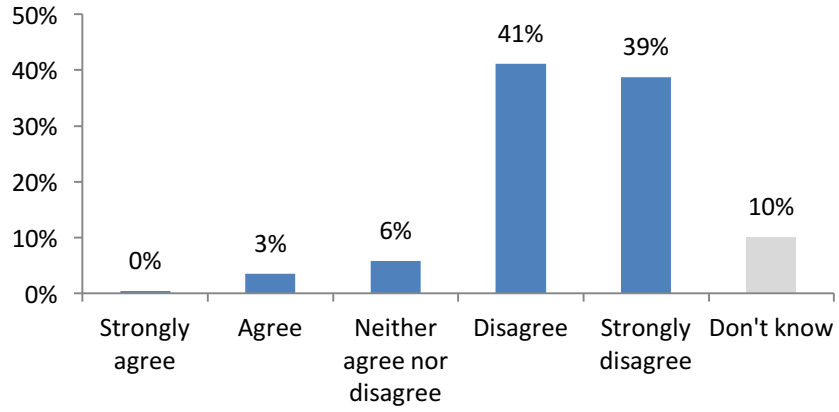
Figure 22: Perceived effectiveness of non-behavioural/non-pharmaceutical interventions for autism



Despite increasing evidence that effective interventions can lead to optimal outcomes, such that 10-25% of individuals no longer meet diagnostic ASD criteria (Fein et al., 2013; Mukaddes, Tutkunkardas, Sari, Aydin, & Kozanoglu, 2014; Orinstein et al., 2014), in Northern Ireland, ASD is still widely viewed as a 'lifelong disability' (Autism NI, 2013; TEACCH, 2014). This view was not representative of the view taken by the general public NILT Survey participants; a vast majority of whom (n=775; 80%) disagreed/strongly disagreed that autism was a lifelong

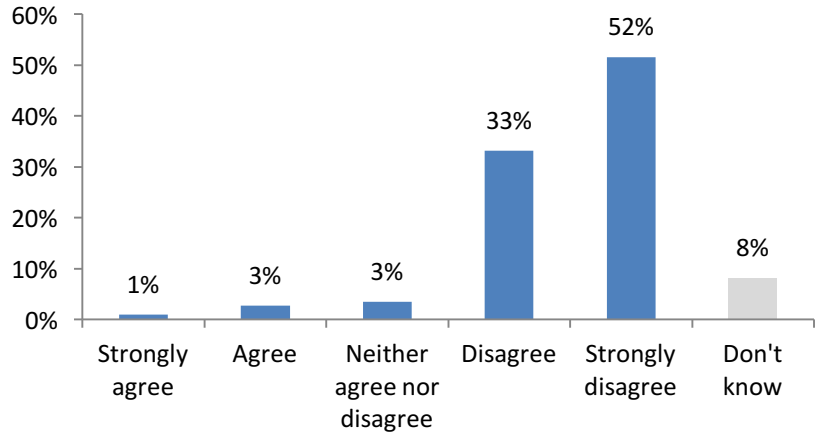
disability and there was nothing that can be done to help individuals with autism (Figure 23; Appendix 30).

Figure 23: Perception that there is nothing that can help individuals with autism



The strongly held view by some autism self-advocates that they do not require intervention or treatment (Woodford, 2006) stands in contrast with parental expressions of support needs for their children (Stewart, 2008). In line with the views of carers, the vast majority of NILT Survey respondents disagreed/strongly disagreed with the notion that people with autism do not need help (n=821; 85%) (Figure 24; Appendix 31).

Figure 24: Perception that people with autism do not need help



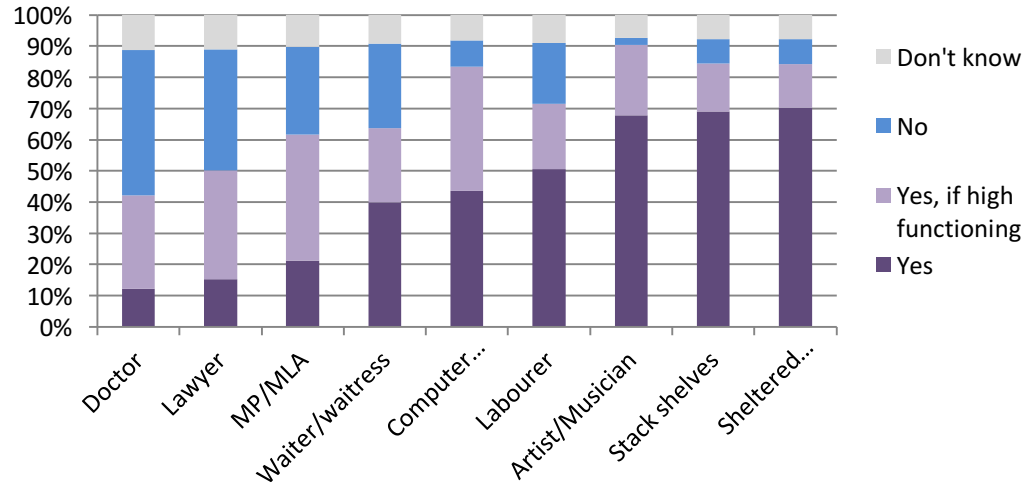
Employment

Obviously, being in gainful employment and thus economic self-sufficiency goes a long way to support people out of the poverty trap. The NILT Survey included a list of jobs, ranging from relatively low skills to manual and highly skilled (based on Standard Occupational Classification, 2010), to explore if the public viewed only certain types of jobs as suitable for someone with autism. Figure 25 (Appendices 32-40) shows that participants felt that there is a wide range of suitable jobs for individuals with autism, in particular, they felt that there was no job related boundary for those with high functioning autism. The majority of respondents thought that someone with autism could potentially work in sheltered employment (n=680; 70%), stack shelves in a supermarket (n=668; 69%), or as an artist/musician (n=656; 68%) regardless of their level of functioning. There was less agreement over jobs such as a labourer on a building site (n=489; 51%), a computer programmer (n=422; 44%), or waiter/waitress (n=385; 40%), which could be considered to be more socially demanding. Even fewer felt that member of parliament or assembly (n=204; 21%), lawyer (n=148; 15%), or doctor (n=118; 12%), all of which are both highly skilled and socially demanding, would be appropriate professions.

Views regarding suitable employment for individuals with high functioning autism were more optimistic for all job types. In total, more than eight in ten respondents felt that suitable jobs for someone with high functioning autism included computer programmer (n=807; 83%), artist/musician (n=875; 90%), stacking shelves (n=819; 85%), and sheltered employment (n=815; 84%). The majority of respondents felt that potentially suitable jobs for individuals with high functioning autism included labourer (n=692; 71%), waiter/waitress (n=616; 64%) and member of parliament or assembly (n=596; 62%). However, for some highly skilled and socially demanding jobs there was slightly less agreement amongst respondents as to their suitability for high functioning individuals, such as doctor (n=408; 42%) and lawyer (n=486; 50%).

Statistical analysis revealed little to negligible difference between attitudes towards the appropriateness of jobs such as artist, stacking shelves, and sheltered employment. These jobs were rated significantly more suitable than jobs such as member of parliament or assembly, lawyer and doctor. They were also rated as more suitable than labourer, programmer, and waiter, albeit to a lesser extent.

Figure 25: Views on the suitability of different job types for individuals with autism

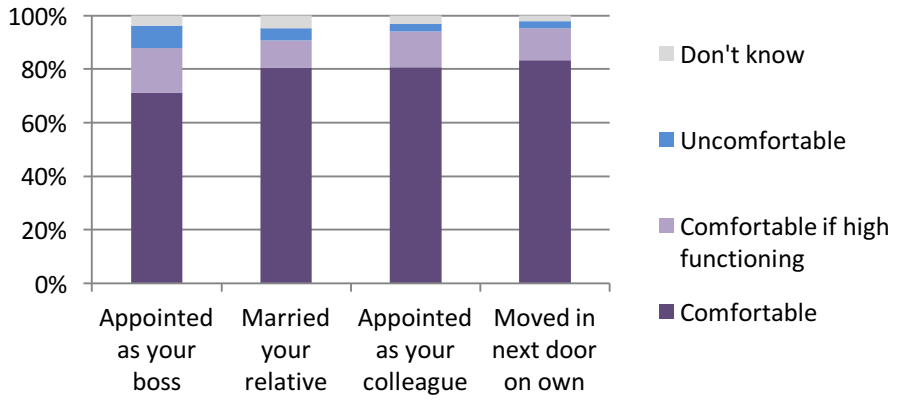


Attitudes and behaviours towards individuals with autism

Understanding public attitudes towards individuals with autism is important. Figure 26 (Appendices 41-44) shows that more than four out of five respondents said that they would feel comfortable if an adult with autism moved in next door on their own (n=803; 83%), married a close relative (n=776; 80%), or was a work colleague (n=776; 81%). Only slightly fewer participants said they would be comfortable if someone with autism was appointed as their boss (n=684; 71%).

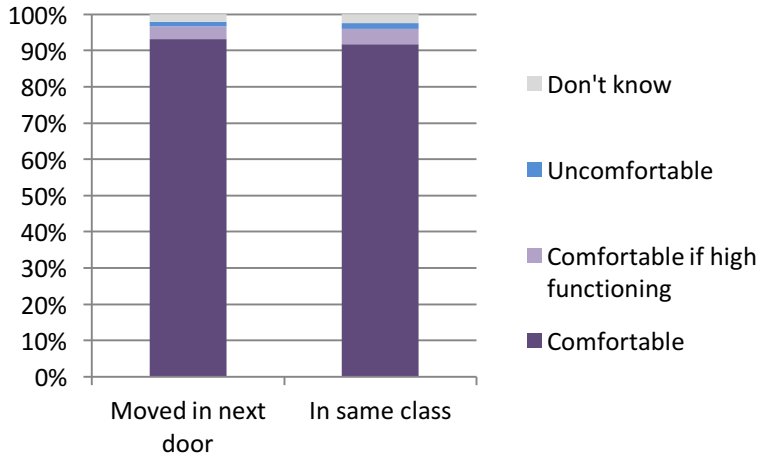
Positive attitudes towards high functioning individuals with autism were even more common. More than nine out of ten respondents said they would be comfortable if someone with high functioning autism moved in next door (n=918; 95%), married a close relative (n=875; 91%) or became a work colleague (n=904; 94%), while 88% (n=845) said they would be comfortable is someone with high functioning autism was their boss.

Figure 26: Attitudes towards adults with autism in employment and social contexts



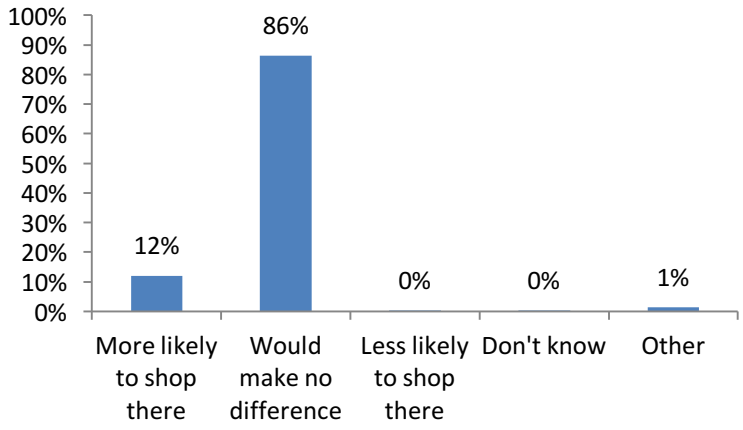
Positive attitudes towards children with autism were even more common, compared to those expressed towards adults (Figure 27; Appendices 45-46). Over 90% of NILT Survey respondents said they would be comfortable if a family who had a child with autism moved in next door (n=898; 93%) or if a child with autism was in the same class as a child from their family (n=885; 92%). For both questions, the number of people who felt comfortable increased by four percentage points when only those with high functioning autism were considered.

Figure 27: Attitudes towards children with autism in education and social contexts



We also wanted to find out if businesses would have to worry about customer relations or sales if they employed someone with autism. A supermarket was given as an example of a business that is frequently used by everyone. The majority of respondents (n=833; 86%) said that if a supermarket employed someone with autism, it would not affect whether or not they shopped there (Figure 28; Appendix 47). More than one in ten said that they would be more likely to shop in a supermarket that had an explicit policy of employing individuals with autism (n=116; 12%).

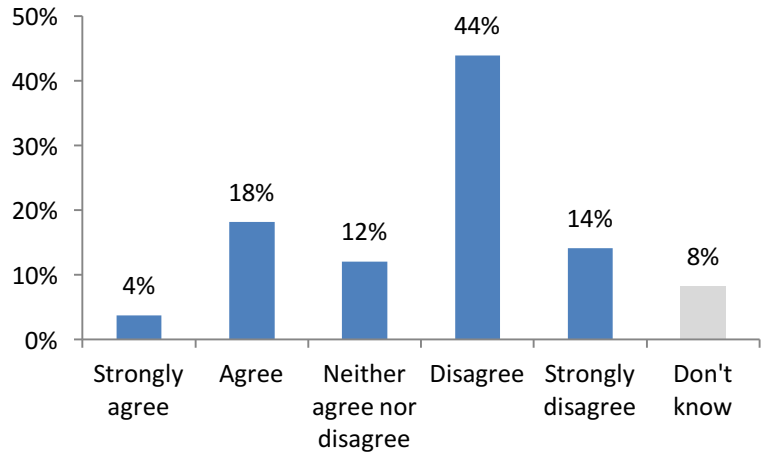
Figure 28: Projected shopping behaviour if someone with autism worked in a supermarket



Lifelong disability

Although autism has historically been viewed as a lifelong disability (Autism NI, 2013; TEACCH, 2014), there is now sufficient evidence to suggest that with adequate intervention 10-25% of children may no longer meet diagnostic criteria (Fein et al., 2013; Orinstein et al., 2014). More than half of respondents (n=558; 58%) disagreed/strongly disagreed that autism is a lifelong disability (Figure 29; Appendix 48).

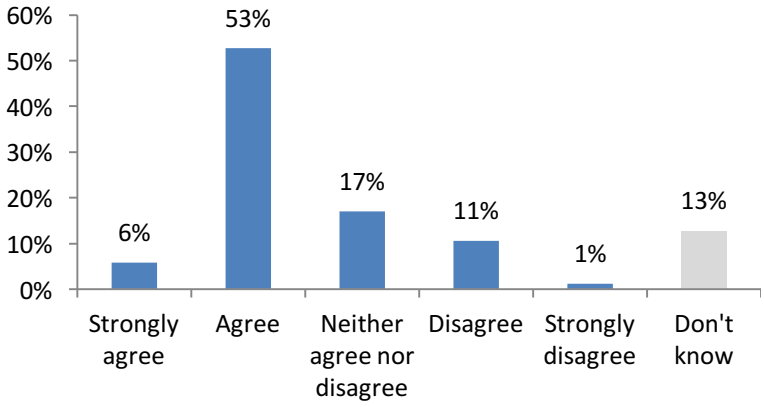
Figure 29: Views on autism as a lifelong disability



Attitudes towards the rights of individuals with autism

Figure 30 (Appendix 49) shows that in response to the statement 'when someone has autism their choices are not respected enough' most participants either agreed or strongly agreed (n=563; 58%).

Figure 30: Views on whether the choices of people with autism are respected enough



Attitudes towards residential care

The majority of carers of individuals with learning disability in Northern Ireland have indicated that they do not want their relatives to live in residential care (Taggart, Truesdale-Kennedy, Ryan, McConkey, & Adamson, 2013)

Figures 31 and 32 (Appendices 50 & 51) show that most respondents disagreed or strongly disagreed that residential care was the best option for someone with severe autism (n=618; 64%) or for the family of someone with autism (n=600; 62%). Relatively few participants strongly agreed or agreed that residential care was the best option for someone with severe autism and their families (n=111; 12%) or the family of someone with autism (n=104; 11%).

Figure 31: Views on whether it is best for people with severe autism (and their families) to be cared for in a residential unit.

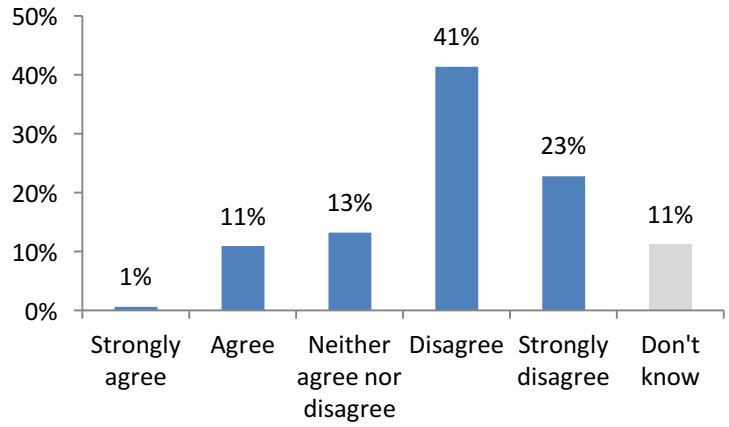
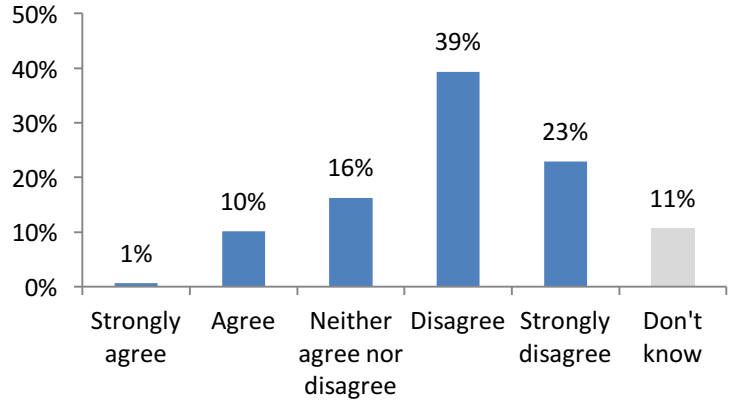


Figure 32: Views on whether it is better for the family of someone with autism if the person is cared for in a residential unit.



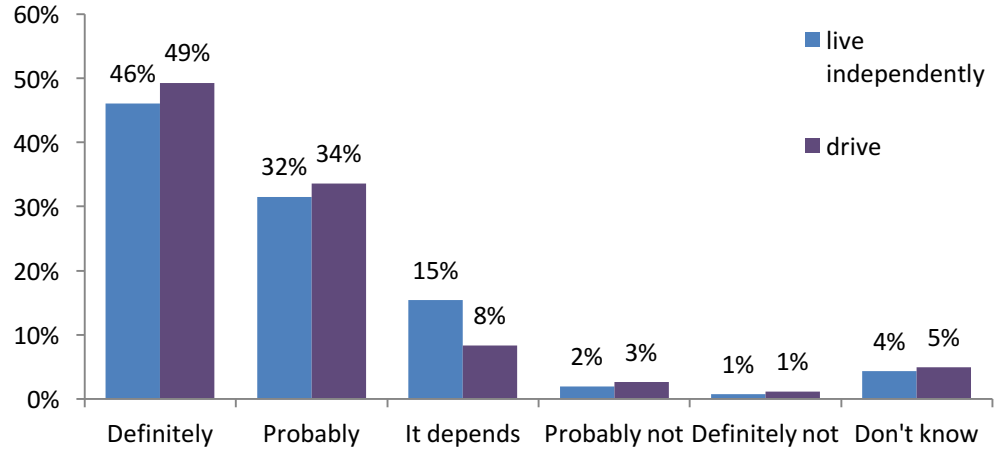
Attitudes towards independence

Figure 33 (Appendices 52 & 53) displays respondents' level of agreement with the following statements:

- an adult with high functioning autism should be encouraged to live independently;
- an adult with high functioning autism be should allowed to drive if they pass the specialist disability tests.

Just under half of participants felt that individuals with high functioning autism should definitely be encouraged to live independently (n=444; 46%), or be allowed to drive if they pass specialist disability tests (n=475; 49%). Around one third felt that individuals with high functioning autism should probably be allowed to live independently (n=303; 32%) or drive (n=324; 34%).

Figure 33: Attitudes towards independence for individuals with high functioning autism



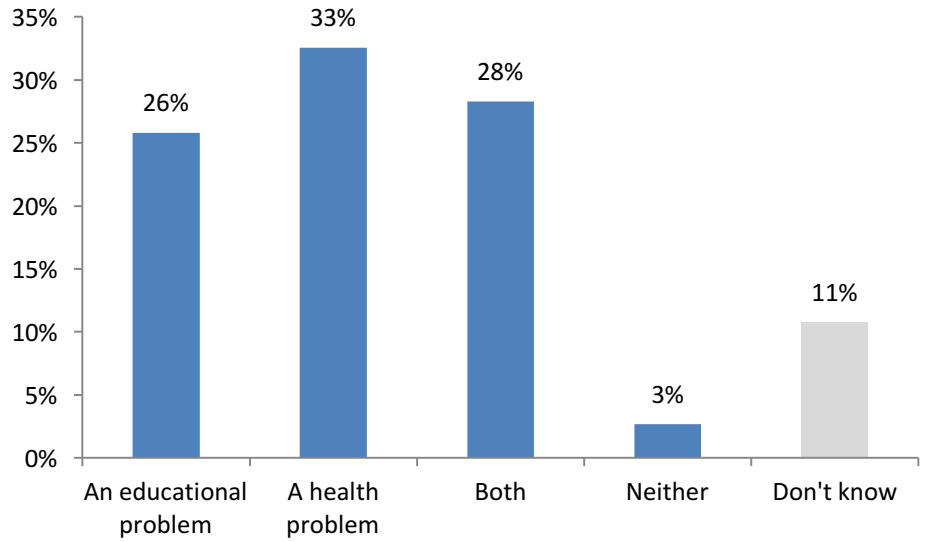
The role of education and health services

The Autism Act (2011) requires the development of a cross-departmental autism strategy. We wanted to find out the general public's awareness with regard to which department they felt was responsible for autism services prior to the development of this strategy. This would provide a baseline against which to assess if the new strategy had an effect on public perception.

Autism services clearly are covered by a range of departments. While the Department of Health, Social Services and Public Safety (DHSSPS) was taking the lead in the development of the strategy, the Department of Education as well as all other departments obviously have key roles to play. Joined-up thinking and working practices are important for health, social care, education, employment, transport etc..

The NILT Survey asked the public about whether health services, education services, both or neither, should play a role in helping individuals with autism (Figure 34; Appendix 54). The respondents were split over whether autism was an educational issue (n=248; 26%), a health issue (n=313; 33%), or if the involvement of both health and educational services was needed (n=272; 28%).

Figure 34: Beliefs about whether autism is an educational issue or a health issue



Discussion

Given increasing prevalence rates of ASD it is important that the general population is aware and able to respond responsibly to the associated strengths and challenges. We included questions about ASD into a general population survey (NILT), prior to the implementation of the first local cross-departmental ASD strategy (2013-2020). The results of the NILT Survey autism module showed that the general public is well aware of autism, has positive attitudes, and is relatively knowledgeable about the issues faced by individuals and families affected directly. However, the there was a lack of clarity about responsibility for effective service delivery.

Awareness and knowledge of autism and autism interventions

The present study found that 82% of the public hd heard of autism, a figure consistent with that reported in an earlier autism awareness survey (Stewart, 2008). Arguably, this level of autism awareness can be considered as high, despite being 10 percentage points below that found in the UK (NAS, 2007). The high level of awareness reported in the present study may be partly explained by the finding that over half of the participants had a family member with autism or knew someone with autism in their wider social circle. This finding is not surprising given the high estimated prevalence of autism (1:88) and the fact that most people probably know more than 88 people; the chances of knowing someone on the autism spectrum is relatively high. Durand-Zaleski et al. (2012) found that in France 100% of adults were aware of autism. However, this survey used online methods meaning that the sample were computer/internet literate and responded to a self-select autism questionnaire. As the present study found an association between internet use and autism awareness, it is likely that the study by Durand-Zaleski et al. (2012) overestimated autism awareness amongst the French public. In contrast, the present study used a general/total population random sample and a 1:1 interview format that was administered by a trained independent interviewers.

Autism awareness did vary across demographic characteristics. Specifically, factors associated with lower autism awareness included being male, not completing higher education, being a young adult (aged 18-24), and those not using the internet. The lowest level of awareness was found amongst those from an ethnic minority background, where less than half had heard of autism. Of course, it is possible that the term ‘autism’ may not translate well for anyone who does not speak English as a first language, and that this figure could underestimate the actual level of autism awareness in that group, who represented a relatively small proportion of the sample.

Apart from the ethnic minority group, none of the other demographic subgroups had autism awareness levels less than 75%, suggesting awareness levels were good amongst different sections of the public. These findings clearly indicate that there is no need for a general ‘autism awareness campaign’ in Northern Ireland, i.e., precious resources would be wasted as many people would be targeted unnecessarily. Instead the Autism Action Plan (2013-2016) should focus on raising autism awareness in specifically targetted groups (e.g., males, young adults, those not using the internet).

While awareness of autism was good, only one fifth (20%) of the sample was aware of local autism specific legislation. Awareness of this legislation was somewhat higher amongst those who had much contact with people affected by autism, although even in this group it was not very high. The question is whether or not increased awareness of this legislation would be beneficial for the general public or specific groups. Arguably, the Autism Act (NI)'s (2011) main function, i.e., mandating the development of a cross-departmental Autism Strategy (2013-2020) has been fulfilled in January 2014, with the launch of the Autism Strategy and first Autism Action plan (2013-2016). Therefore, it would seem un-necessary to invest in awareness raising with regards to the legislation. Given that the Autism Act also amended the discrimination legislation, it would seem most efficacious to invest in anti-discrimination training in schools and other public sectors instead.

Using a quantitative approach, Stewart (2008) and NAS (2007) found that the most people in the UK and vast majority in Northern Ireland recognised that individuals with autism face challenges with communication, dealing with changes in routine, making sense of the world, difficulty making friends, and obsessive behaviours. In contrast, the present study adopted a qualitative approach by allowing people to spontaneously name the strengths as well as the challenges that they associated with autism, thus not restricting or pre-empting their responses. When asked about the strengths associated with autism, the majority of the participants mentioned being intelligent, creative, loving or determined. The academic strengths listed would, of course, not apply to everyone who has autism, just as they would not apply to everyone in the general population. Nevertheless, it is encouraging to see that people had such positive views on individuals with autism.

The NILT Survey participants also named a range of challenges, which overlapped with but also extended beyond the range of challenges that were identified in previous general population surveys (NAS, 2007; Stewart, 2008) The range of challenges (expressed freely to an open ended question) covered many of the core features of autism as well as challenges in other areas of life which have been identified in the literature, such as gaining employment (Rosenblatt, 2008), being independent (Broach et al., 2003), and learning (Elsabbagh et al., 2012). Some participants pointed out that individuals with autism are likely to vary in terms of the difficulties that they experience. Overall, issues such as finding employment, mental health problems, dependency on parents, and individual differences were mentioned infrequently by the respondents, and this was likely a reflection of the lack of focus on these issues by the UK media (Huws & Jones, 2010).

While in the past autism was considered relatively uncommon, recent studies evidenced increasing prevalence rates up to 1 in 88 for all age groups (CDC, 2012) and 1:50 children (CDC, 2013; cf. BASE Project Report Volume 2). The NILT Survey revealed that 38% of the public were aware of this increase, however, a similar proportion of the participants estimated the prevalence to be more in line with figures reported over 10 years ago, when autism prevalence was estimated to be approximately 1 in 900/1000 (Croen, Grether, Hoogstrate & Selvin, 2002). The remaining participants were either unsure about prevalence or thought that autism occurred less than 1 in 10,000, i.e., figures reported in the 1970s (Frombonne, 1999). These findings indicated that many people were not aware of how common autism is today, despite the fact that they actually knew someone with ASD.

The level of contact with someone affected by autism was associated with knowledge of autism prevalence, yet only half of those who had a lot of contact with someone with autism were aware of accurate prevalence rates. More than two fifths of younger adults (i.e. 18-24 years) accurately assessed prevalence rates for autism, compared to around one fifth of those aged 65+ years of age. This finding may be partly due to the higher prevalence of autism in younger age groups (e.g. CDC, 2013), i.e. there was likely to be a higher prevalence of autism amongst the peers of 18-24 year olds than amongst those of 65+ year olds. Consistent with other findings, females were more likely than males to be aware of the actual prevalence of autism.

The realisation of accurate prevalence rates is important especially for those directly affected y autism in order to combat the notion that 'it only happens to me'. This idea is not unfamiliar in psychology, especially in situations of crisis and it is the cornerstone of self-help and support groups, where people in similar situations meet and realise that indeed others are in a situation similar to their own. This realisation is often considered helpful and allows for learning from others through modelling and imitation (Lindsay, Moore, Anderson & Dillenburger 2013).

Consistent with Stewart (2008), the majority of NILT Survey participants felt that someone with autism would have special abilities, even though in fact only in 1 in 200 individuals with autism does have savant abilities (Hermelin, 2001). On the one hand, it is possible that participants may have adopted a broader definition of special ability than that of Hermelin (2001), but it also likely that people have been influenced by the portrayal of savants with autism in the media (e.g. the film 'Rain Man').

While autism is widely considered a neurodevelopmental disorder (e.g., McAlonan et al., 2002, 2005), only 57% of respondents believed that autism was a brain disorder. Awareness that autism is not a mental illness was high, with only 5% saying that individuals with autism definitely have a mental illness, however there was recognition mental health problems co-occur frequently and these views were consistent with the research literature (MacNeil et al., 2009). The rate of co-occurring learning difficulties is not well established and estimates vary between 15-55% (Elsabbagh et al., 2012). This disparity was reflected in the public perception. Yet, the vast majority of respondents were aware that individuals with autism can display challenging behaviours.

The Autism Act (NI) 2011 identified the Department of Health and Social Services as taking the lead in strategy development, but also specifies a role for other departments. For example, the Department of Education plays a key role in strategic development of educational services. Clearly, joined-up working practices are important for health, social care, education, employment, transport, and others. We found that the public was quite unclear about the role of the key departments highlighting the need for more clarity and leadership when in devising strategies and policies. For example, the Autism Strategy launched by the Minister for Health, Social Services and Public Safety, Edwin Poots in January 2014 offered a unique opportunity to provide guidance with regard to the roles that health, education and the other areas of government play. Future replications of the NILT Survery Autism module will show if these had a effect on public perception of departmental roles.

Attitudes and inclusive society

In general, positive and inclusive attitudes and a commitment to a more inclusive society were expressed in the NILT Survey, with regard to the participation of children and adults with autism in community and social life. Results showed that the general public was accepting and comfortable living, working and educating inclusively with individuals with autism. Although there was some confusion about drug treatment, there was an openness with regard to effective behavioural interventions to promote independence and inclusion. The idea that autism is necessarily life long was not supported.

In terms of visibility or recognition of autism and access to appropriate social and educational activities, the survey revealed overwhelmingly positive attitudes towards children with autism in society and in schools. However, while it was promising to see adults being positive, there is a

need for future research to look specifically at the attitudes of children towards autism. Autism modules are to be included in the Young Life and Times Survey (YLT, www.ark.ac.uk/ylt/) and the Kids Life and Times Survey (KLT, www.ark.ac.uk/klt/). Data will be reported in due course (Dillenburger, McKerr, Schubolz, Lloyd, 2014, in preparation).

A number of studies indicate that simply 'informing' typically-developing children about classmates with autism does not necessarily result in positive attitudes (Swaim & Morgan, 2001; Morton & Campbell, 2007), although there is increasing evidence that peer mentoring, or 'buddying' for both academic and social skills has long-term beneficial effects not just for the student with autism (Rodriguez et al., 2007; Kohler et al., 2007) but also in relation to improved self-esteem and better quality of overall friendships for the 'tutor' (DiSalvo & Oswald, 2002). For example, the use of naturalistic group tutoring can result in continuing positive levels of reciprocity in play and in classroom interaction even after the intervention ceases (Kohler et al., 2007; Harper et al., 2008).

In the NILT Survey, positive attitudes were expressed towards parents who have children with autism, with very few members of the public believing that poor parenting causes autism. The widely cited but subsequently retracted article in the Lancet linking autism to vaccinations ,namely MMR (Wakefield et al., 1998) has been largely discredited (Wilson et al., 2003; Demicheli et al., 2012) and this message has been disseminated to the public via the media and health campaigns (for example, NHS, 2008). The attitudes expressed in the NILT Survey show that the vast majority of the public were confident that autism and MMR are not causally linked. Instead, consistent with Durand-Zaleski et al. (2012) in France, the public in Northern Ireland were most likely to think that autism is inherited, a proposition that has at least some levels of scientific support (MRC, 2001).

With respect to social interaction and participation in community life, previous research revealed that carers felt their sons and daughters with autism needed some degree of support, depending on the particular needs of the individual (Stewart, 2008; Keenan et al., 2010). When asked about support and intervention, the vast majority of NILT Survey respondents expressed similar views. Around half of respondents were of the opinion that drugs could be effective in helping people affected by autism. This view was somewhat out of line with the evidence base that showed that drugs are not effective in treating the core features of autism and that many drugs have unpleasant side effects (Warren et al., 2011). It was surprising to find that while there was strong support for behaviour analysis-based interventions that represent evidence-based practice

(National Autism Centre, 2009), there was also support for an eclectic use of other non-pharmacological interventions that has no scientific evidence of effectiveness (Howard et al., 2005). This finding reflects Government policy in NI that was still in support of an eclectic approach (Task Group Report on Autism, 2002) rather than fully embracing current best evidence-based practice of applied behaviour analytic procedures (Autism Speaks, 2014).

The right to work is another dimension of inclusion, and individuals with autism clearly face many barriers to employment as evidenced by their relatively low employment rate of 15% (Rosenblatt, 2008). In order to gain employment, individuals with autism may need specific help and personal support and, once they have found a job, they may need on-going support getting to work, adjusting to the employment setting, and relating to their co-employees. Employers need training on how to interview and manage someone with autism (Forsythe et al., 2008). Of course, colleagues also need to be inducted in how to relate to possible idiosyncrasies of their new work colleague and the resources to facilitate these adjustments are not always easily available.

Attitudes towards individuals with autism in the workplace can also present as a barrier to inclusion and may even result in the individual leaving employment (Bancroft et al., 2012). Therefore it was important to get a better understanding about how the public feel about working with someone with autism and what sort of jobs they would deem suitable. It was encouraging to see that the vast majority of NILT Survey respondents stated that they would be comfortable working with someone with autism. These views were consistent with those expressed in other attitude surveys (Durand-Zaleski et al., 2012; Stewart, 2008). In addition, the NILT Survey results suggested that the public felt that a wide range of jobs could be suitable for individuals with autism, especially if the individual was high functioning. The job expectations for individuals with autism thus would be similar to what would be expected of anyone else. These views were consistent with previous research (Howlin et al., 2005).

Furthermore, a significant number of respondents stated that they would be more likely to give business to an employer who actively employed people with autism (12% would shop more in a supermarket with such a policy). Thus employers should feel confident about actively employing people with autism. A good example is the German software company SAP (Systems, Applications, and Products in Data Processing), who actively sought to employ individuals with autism (Vasagar, 2013). This firm recognised and was confident that individuals with autism could offer a unique contribution to the productivity of the firm through their attention to detail

and accuracy in data analysis. SAP have entered into partnership with Specialisterne, a Danish company that established a data software testing model for employing people with autism; Specialisterne has branches in Germany, Iceland, Switzerland, the United States, and the Republic of Ireland (Hodson, 2013; Thygesen, 2012). Another example is Vodafone Germany who entered into a partnership with Auticon, who specialise in placing and mentoring people with autism in employment in the information technology industry (Evans, 2013). Smaller localized examples also exist, such as The Undiscovered Workforce campaign by the National Autistic Society (NAS) in Cambridge that brought together people with autism and local employers (Huppert, 2013).

Meeting the needs of people with autism includes their right to fully participate in the social and cultural life of the community, something that is not always possible in residential care homes. When asked about their views on issues such as residential care, most NILT Survey participants disagreed that this was the best option for someone with severe autism and their families. Generally speaking, these views were consistent with the preferences of families (Taggart et al., 2013) and policy, such as Transforming Your Care (DHSSPS, 2011) and Care Management, Provision of Services and Charging Guidance (DHSSPS, 2010). For example, the Bamford Action Plan 2012-2015 (DHSSPS, 2012) set out guidelines for a user-centred framework for mental health and disability services, with a focus on deinstitutionalisation of services.

Just over half of the NILT Survey respondents felt that the rights of individuals with autism were not respected enough. These findings were line with previous research that identified that only 1 in 10 adults with autism had received advocacy support and other 1 in 10 expressed a need for advocacy but were unable to avail of it (Broach et al., 2003). This figure rose to one in four in the lowest household income bracket (ibid.).

As noted previously, there is ample evidence that early and intensive behaviour analytic interventions is statistically significantly linked to optimal outcomes (Orinstein et al., 2014); Fein et al. (2013) confirmed that with the right intervention between 1.5% (Rutter, 1970) to 25% (Helt et al., 2008) of individuals can lose their diagnosis. In the French survey only one quarter of respondents were confident that with treatment someone with autism could lead a ‘normal’ life (Durand-Zaleski et al., 2012). The NILT Survey respondents were more optimistic about outcomes for individuals with autism, with more than half disagreeing that autism was a lifelong disability.

One of the key limitations of this survey is that survey findings are by definition self-reported and they do not necessarily translate into actual behaviours. Despite the expression of positive attitudes in the NILT Survey, individuals with autism still are commonly bullied in schools and in the workplace (Bancroft et al., 2012; Rosenblatt, 2008). It could be the case that, as in most cases of bullying, these are the actions of only a few people, however, the correspondence between what people say and what they do (say-do correspondence) is generally weak (Lloyd, 1994) and further research would have to explore the say-do correspondence in the general public in relation to individuals with autism..

Conclusion

In conclusion, the NILT Survey autism module offered a baseline against which the impact of new autism legislation, policies, and strategies can be measured. The survey revealed that by-and-large the public were aware of autism and its key features, e.g., over half of participants knew someone on the autism spectrum. While there was a tendency to overestimate the occurrence of special talents, overall there were good levels of knowledge of the diagnostic features of autism. These finding indicated that local and international efforts to improve autism awareness amongst the public have been successful. While there is always room for improvement, particular in certain parts of society, findings reported here show that the time has come to shift the focus from mere awareness raising campaigns to a more advanced approach that delivers clarity with regard to intervention, accountability, and responsibility.

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Appendices

Appendix 1: Autism Module Questions

SECTION 3: AUTISM
Now we come on to the next topic which is something that affects many people in Northern Ireland today, that is, autism. We are interested in getting a picture of the general public's perceptions of Autism, what they think it is and general attitudes around it.

DEFINITION:

'high functioning' means the person with autism will have a normal or higher than average IQ, and can have a certain degree of independence, although they may find socialising with other people difficult. Someone described as 'low functioning' will have serious learning difficulties as well as problems socialising, and will usually be quite dependent for help in everyday living.

'High functioning ' is a term which indicates that the person has autism, that is, they may have difficulties with social and communication skills, and that they are of average or above average intelligence. They do not have learning difficulties

HEARDASD

Q1 Have you ever heard of *autism,* A*utism Spectrum Disorder or Asperger's Syndrome*?

Yes	1	Ask Q2
No	2	Go to next section

HEARDAA

Q2 Have you ever heard of the Autism Act (Northern Ireland) 2011?

Yes	1
No	2

The next questions ask what you know about autism and what you think people with autism are like. It doesn't matter if you don't know very much. When we ask about autism we mean all the different types of autism including Asperger's Syndrome.

Q3 First, do you know anybody personally who has a diagnosis of autism?
CODE ALL THAT APPLY

	Yes		
KNOWA1	Myself	1	
KNOWA2	Close relative	1	Ask a)
KNOWA3	Other family member	1	
KNOWA4	Friend	1	
KNOWA5	Acquaintance	1	
KNOWA6	I work with people with autism		
KNOWA7	No		
KNOWA8	(Don't know)		

If respondent says 'Myself', 'Close relative' or 'Other family member' at Q1, add: If, at any time, talking about these things is upsetting, please let me know and we can skip to the end of the section. (Include a marker at every page to show if respondent wishes to skip to the end of the section.)

ASK IF CODES OTHER THAN 'MYSELF' AT Q3

KNOWAC

Q3a Can I just check is this person a child or an adult?

Child	1
Adult	2
I know both children and adults with autism	3

Q4 When you think of somebody with autism what, if any, do you think are their main difficulties or problems?

None	
Don't know	

Q5 When you think of somebody with autism what, if any, do you think are their main strengths?

None	
Don't know	

RATEAUT

Q6 How common do you think autism is in our society today? Would you say that 1 in 100, 1 in 1,000 or 1 in 10,000 people have autism?

SHOWCARD

1 in 100 people	1
1 in 1,000 people	2
1 in 10,000 people	3
Don't know	4

Q7 Choosing your answer from this card, could you tell me whether you think people with autism have...

SHOWCARD

	Definitely	Probably	Probably not	Definitely not	Don't know
AUTBRAIN ...A brain disorder	1	2	3	4	8
AUTMILL ...A mental illness	1	2	3	4	8
ABEHPROB ...A behavioural problem	1	2	3	4	8
ALDISAB ...A type of learning disability	1	2	3	4	8
ASPECAB ...Special abilities, for example in maths, music, art	1	2	3	4	8

Q8 How much do you agree or disagree with the following statements about the **causes** of autism?

SHOWCARD

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	DK
ACAUSE1 Autism is caused by vaccines like MMR	1	2	3	4	5	8
ACAUSE2 Autism is caused by something in the environment	1	2	3	4	5	8
ACAUSE3 Autism can be inherited	1	2	3	4	5	8
ACAUSE4 Autism is caused by poor parenting skills	1	2	3	4	5	8

Q9 How much do you agree or disagree with the following statements about the **treatment** of autism?

SHOWCARD

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	DK
AUTDRUGS There are drug treatments that are effective in helping people with autism	1	2	3	4	5	8
AUTBEH There are behavioural interventions that are effective in helping people with autism	1	2	3	4	5	8
AUTNDRUG There are other non-drug related therapies and supports that that are effective in helping people	1	2	3	4	5	8
AUTNOTHG There is nothing that can help with autism	1	2	3	4	5	8
AUTNOHLP People with autism do not need help	1	2	3	4	5	8

Q10 Thinking about adults with autism, what kind of jobs do you think that people with autism can do if they just have autism and no other conditions that might affect their abilities? **SHOWCARD** (NB The whowcard shows the responses. Jobs are read out by interviewers. Put definition on Showcard)

	Yes	Yes, but only if they are high functioning	No	Don't know
AMP Member of Parliament or Assembly?	1	2	3	8
ACOMPROG Computer programmer	1	2	3	8
AARTIST Artist/Musician	1	2	3	8
AWAITER Waiter or waitress	1	2	3	8
ADOCTOR Doctor	1	2	3	8
ASMARKET Stacking shelves in a supermarket	1	2	3	8
ALAWYER Lawyer	1	2	3	8
ALABOUR Labourer on a building site	1	2	3	8
ASHELEMP Sheltered employment in a day centre	1	2	3	8

Q11 Would you personally feel comfortable or uncomfortable if...**READ OUT**…

SHOWCARD

	Comfortable	Comfortable, but only if they were high functioning	Uncomfortable	Don't know
AANXDOOR ... an adult with autism moved in next door on their own	1	2	3	8
ARELMARR ... one of your close relatives married someone with autism.	1	2	3	8
ABOSS ... an adult with autism was appointed as your boss.	1	2	3	8
ACOLL ... an adult with autism was appointed as your colleague.	1	2	3	8

Q12 And thinking about a child with autism, would you be comfortable or uncomfortable if...**READ OUT**…

SHOWCARD

	Comfortable	Comfortable, but only if they were high functioning	Uncomfortable	Don't know
ACNXDOOR ... a family who had a child with autism moved in next door	1	2	3	8
ACCLASS ... a child with autism was in class with a child from your own family	1	2	3	8

SHOPAUT

Q13 If a supermarket near you announced a new policy of employing people who have autism, would you be more likely to shop there, less likely to shop there or would it make no difference?

More likely to shop there	1
Less likely to shop there	2
It would make no difference	3
(Other answer – write in)	4
Don't know	8

CONTACTA

Q14 Thinking about your own contact with children or adults with autism, would you say that you have had a lot of contact, a little contact or no contact at all?

A lot of contact	1
A little contact	2
No contact at all	3
Don't know	8

Q15 Here are some statements that have been made about people with autism or Asperger's Syndrome. How much do you agree or disagree with each of these? **SHOWCARD**

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Don't know
ADISAB Autism is a life-long disability and you can do nothing about it	1	2	3	4	5	8
ARESPCT When someone has autism their own choices are not respected enough	1	2	3	4	5	8
AUTRESID It is better for people with severe autism and their families if they are cared for in a residential unit	1	2	3	4	5	8
AUTFRES It is better for the family of someone with severe autism if the person is cared for in a residential unit	1	2	3	4	5	8

Q16 Thinking about an adult with high functioning autism, do you think that in most cases they should...**SHOWCARD**

	Definitely	Probably	It depends	Probably not	Definitely not	(Don't know)
AUTLIND Be encouraged to live independently?	1	2	3	4	5	8
AUTDRIVE Be allowed to drive if they pass the specialist disability tests?	1	2	3	4	5	8

CAEHPROB

Q17 And finally, do you think that a child with autism has an educational problem or a health problem?

An educational problem	1
A health problem	2
(Both)	3
(Neither)	4
Don't know	8

Appendix 2: Advance letter sent to participants

THE HOUSEHOLDER

«sub_building»

«Building_n»

«Building_1» «Primary_th»

«secondary_»

«town»

Co «county»

«postcode» «Unique_ID

Date as postmark

Dear Sir / Madam

The Northern Ireland Life and Times Survey 2012: have your say!

We are writing to invite you to take part in this year's ***Northern Ireland Life and Times survey*** – a major study carried out every year by researchers at Queen's University and the University of Ulster**.** The Life and Times survey is the leading independent source of information on what people in Northern Ireland think about a wide range of social and political issues. The survey is used and analysed by government, universities and the media. This year the survey covers opinions about community relations, people from minority ethnic groups living in Northern Ireland, autism and equality issues.

We plan to interview 1,200 people across Northern Ireland. The survey needs to be representative of all sections of our community – and this is where we are asking for your help. Your address was selected at random from the Post Office's list of postcodes and we would like to ask the person in your household with the next birthday to take part in the interview.

Perceptive Insight Market Research is an independent research company which has been commissioned to conduct the survey on our behalf. One of Perceptive Insight's interviewers will call at your home over the next few weeks to arrange a time to complete the survey. The interviewer will carry an identification card which should be presented to you.

All information collected will be treated in strict confidence and will be processed solely for the purposes of social research. Perceptive Insight, the University of Ulster and Queen's University Belfast conform to the principles of the Data Protection Act (1998). The survey is completely confidential and <u>your name will never be associated with the answers you give</u>.

Please remember that the survey is completely voluntary. If you have any queries at all about the survey, please telephone Perceptive Insight at 028 90737090.

Thank you, in anticipation, for your help.

Yours faithfully

Professor Gillian Robinson
University of Ulster

Dr Paula Devine
Queen's University Belfast

Appendix 3: Have you ever heard of autism, Autism Spectrum Disorder or Asperger's Syndrome?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figure
				Lower	Upper	
Frequency	Yes	988.57	19.90	949.54	1027.61	970
	No	194.11	14.08	166.49	221.72	212
	Don't know	21.32	4.95	11.62	31.03	22
	Total	1204.00	16.05	1172.51	1235.49	1204
% of Total	Yes	82.11%	1.20%	79.62%	84.35%	80.56%
	No	16.12%	1.16%	13.98%	18.52%	17.61%
	Don't know	1.77%	0.41%	1.12%	2.78%	1.83%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 4: Summary of logistic regression for variables predicting autism awareness

	Heard of autism		**b**	**p**	**OR**	**95% CI**
	% Yes (N)	% No (N)				
Constant			-2.69			
Gender						
Male	77.18 (422)	22.82 (125)	.65	<.001	1.91	1.39 - 2.64
Female (reference)	86.20 (567)	13.80 (91)				
Internet use						
Yes (reference)	87.09 (749)	12.91 (111)				
No	69.68 (240)	30.32 (104)	1.16	<.001	3.20	2.18 - 4.72
Higher education						
Yes (reference)	92.50 (317)	7.50 (26)				
No	77.97 (671)	22.03 (190)	1.09	<.001	2.97	1.86 - 4.73
Ethnic minority						
Yes	44.44 (20)	55.56 (25)	2.46	<.001	11.69	5.83 - 23.44
No (reference)	83.62 (968)	16.38 (190)				
Age						
18-24 years (reference)	75.72 (101)	24.28 (32)				
25-34 years	84.39 (160)	15.61 (30)	.67	.035	1.96	1.05 – 3.65
35-44 years	86.24 (192)	13.76 (31)	.76	.013	2.13	1.17 – 3.86
45-54 years	83.75 (183)	16.25 (36)	.51	.085	1.67	0.93 – 3.00
55-64 years	87.61 (162)	12.39 (23)	1.06	.001	2.88	1.51 – 5.51
65+ years	74.73 (189)	25.27 (64)	.61	.040	1.84	1.03 – 3.30

Note. R^2 = .12 (Cox & Snell) .19 (Nagelkerke). Model x^2 (9) = 146.19, p < .001, OR= odds ratio; CI 95% = confidence interval of 95%.

Appendix 5: Have you ever heard of the Autism Act (Northern Ireland) 2011?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Yes	199.03	14.49	170.59	227.46	191
	No	778.06	21.18	736.51	819.61	767
	Don't know	11.48	3.65	4.31	18.65	12
	Total	988.57	19.90	949.54	1027.61	970
% of Total	Yes	20.13%	1.41%	17.51%	23.04%	19.69%
	No	78.71%	1.44%	75.75%	81.39%	79.07%
	Don't know	1.16%	0.37%	0.62%	2.16%	1.24%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 6: Summary of logistic regression for variables predicting autism legislation awareness

	Heard of Autism Act		**b**	**p**	**OR**	**95% CI**
	% Yes (N)	% No (N)				
Constant			-.98			
Gender						
Male	15.56 (66)	84.44 (356)	.40	.026	1.49	1.05 – 2.11
Female (reference)	23.53 (133)	76.47 (434)				
Higher education						
Yes (reference)	31.90 (101)	68.10 (216)				
No	14.58 (98)	85.42 (574)	.93	< .001	2.53	1.81 – 3.55
Contact						
A lot (reference)	41.37 (89)	58.63 (126)				
A little	19.42 (77)	80.58 (320)	-1.10	< .001	0.33	0.23 – 0.49
None	8.96 (30)	91.04 (306)	-1.85	< .001	0.16	0.10 – 0.25
Don't know	17.24 (3)	82.76 (13)	-1.09	.115	0.34	0.09 – 1.30

Note. R^2 = .11 (Cox & Snell) .18 (Nagelkerke). Model x^2 (5) = 116.02, p < .001, OR= odds ratio; CI 95% = confidence interval of 95%.

Appendix 7: Do you know anybody personally who has a diagnosis of autism? - Myself

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted figures
				Lower	Upper	
Frequency	Yes	*	*	*	*	*
	No	*	-*	*	*	*
	Total	988.57	19.90	949.54	1027.61	970
% of Total	Yes	<1%	*	*	*	*
	No	>99%	*	*	*	*
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

* figure suppressed for disclosure control purposes.

Appendix 8: Do you know anybody personally who has a diagnosis of autism? - Close relative

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Yes	107.71	10.76	86.61	128.82	110
	No	880.86	20.93	839.80	921.91	860
	Total	988.57	19.90	949.54	1027.61	970
% of Total	Yes	10.90%	1.07%	8.96%	13.19%	11.34%
	No	89.10%	1.07%	86.81%	91.04%	88.66%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 9: Do you know anybody personally who has a diagnosis of autism? - Other family member

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Yes	77.64	9.68	58.65	96.64	75
	No	910.93	20.49	870.73	951.12	895
	Total	988.57	19.90	949.54	1027.61	970
% of Total	Yes	7.85%	0.96%	6.16%	9.96%	7.73%
	No	92.15%	0.96%	90.04%	93.84%	92.27%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 10: Do you know anybody personally who has a diagnosis of autism? - Friend

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Yes	206.68	14.63	177.98	235.38	198
	No	781.89	21.22	740.25	823.53	772
	Total	988.57	19.90	949.54	1027.61	970
% of Total	Yes	20.91%	1.42%	18.25%	23.84%	20.41%
	No	79.09%	1.42%	76.16%	81.75%	79.59%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 11: Do you know anybody personally who has a diagnosis of autism? - Acquaintance

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Yes	188.64	14.33	160.53	216.75	183
	No	799.93	21.01	758.71	841.15	787
	Total	988.57	19.90	949.54	1027.61	970
% of Total	Yes	19.08%	1.39%	16.50%	21.96%	18.87%
	No	80.92%	1.39%	78.04%	83.50%	81.13%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 12: Do you know anybody personally who has a diagnosis of autism? - I work with people with autism

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Yes	78.74	9.83	59.45	98.02	72
	No	909.83	20.45	869.70	949.96	898
	Total	988.57	19.90	949.54	1027.61	970
% of Total	Yes	7.96%	0.98%	6.25%	10.10%	7.42%
	No	92.04%	0.98%	89.90%	93.75%	92.58%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 13: Do you know anybody personally who has a diagnosis of autism? - No

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Yes	369.62	18.18	333.95	405.29	371
	No	618.95	21.11	577.53	660.37	599
	Total	988.57	19.90	949.54	1027.61	970
% of Total	Yes	37.39%	1.70%	34.13%	40.77%	38.25%
	No	62.61%	1.70%	59.23%	65.87%	61.75%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 14: Do you know anybody personally who has a diagnosis of autism? - Don't know

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Yes	13.12	3.61	6.04	20.20	15
	No	975.45	20.10	936.01	1014.89	955
	Total	988.57	19.90	949.54	1027.61	970
% of Total	Yes	1.33%	0.37%	0.77%	2.27%	1.55%
	No	98.67%	0.37%	97.73%	99.23%	98.45%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 15: Is this person a child or an adult?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Child	361.97	18.11	326.44	397.49	354
	Adult	121.38	12.10	97.65	145.12	115
	Children and adults	39.37	6.60	26.41	52.32	40
	Don't know	3.83	2.94	-1.95	9.60	2
	Total	526.54	20.46	486.41	566.68	511
% of Total	Child	68.74%	2.27%	64.13%	73.02%	69.28%
	Adult	23.05%	2.08%	19.23%	27.38%	22.50%
	Children and adults	7.48%	1.23%	5.40%	10.27%	7.83%
	Don't know	0.73%	0.56%	0.16%	3.22%	0.39%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 16: Would you say that you have had a lot of contact, a little contact or no contact at all with children or adults with autism?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	A lot of contact	215.43	14.85	186.29	244.57	216
	A little contact	396.96	18.98	359.72	434.20	382
	No contact at all	335.72	17.63	301.13	370.31	336
	Don't know	15.86	4.45	7.12	24.59	14
	Total	963.97	20.06	924.60	1003.33	948
% of Total	A lot of contact	22.35%	1.47%	19.59%	25.37%	22.78%
	A little contact	41.18%	1.75%	37.79%	44.66%	40.30%
	No contact at all	34.83%	1.69%	31.59%	38.21%	35.44%
	Don't know	1.64%	0.46%	0.95%	2.84%	1.48%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 17: How common do you think autism is in our society today?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	1 in 100 people	372.35	18.53	336.00	408.71	359
	1 in 1,000 people	358.68	18.47	322.44	394.93	345
	1 in 10,000 people	102.25	10.63	81.38	123.11	101
	Don't know	141.61	12.00	118.07	165.16	153
	Total	974.90	19.98	935.70	1014.11	958
% of Total	1 in 100 people	38.19%	1.72%	34.88%	41.62%	37.47%
	1 in 1,000 people	36.79%	1.71%	33.50%	40.22%	36.01%
	1 in 10,000 people	10.49%	1.07%	8.56%	12.79%	10.54%
	Don't know	14.53%	1.21%	12.31%	17.06%	15.97%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 18: Do you think people with autism have a brain disorder?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Definitely	123.02	11.77	99.93	146.12	116
	Probably	431.95	18.58	395.50	468.40	439
	Probably not	155.28	13.19	129.42	181.15	150
	Definitely not	118.65	12.11	94.90	142.40	109
	Don't know	142.71	12.81	117.58	167.84	142
	Total	971.62	20.00	932.39	1010.85	956
% of Total	Definitely	12.66%	1.18%	10.52%	15.17%	12.13%
	Probably	44.46%	1.75%	41.05%	47.91%	45.92%
	Probably not	15.98%	1.31%	13.57%	18.72%	15.69%
	Definitely not	12.21%	1.21%	10.04%	14.78%	11.40%
	Don't know	14.69%	1.27%	12.36%	17.37%	14.85%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 19: Do you agree or disagree that autism can be inherited?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Strongly agree	37.18	6.52	24.39	49.98	36
	Agree	353.76	18.70	317.07	390.46	333
	Neither agree nor disagree	130.13	11.79	106.99	153.27	133
	Disagree	177.70	13.92	150.40	205.01	170
	Strongly disagree	73.81	9.02	56.12	91.51	74
	Don't know	199.03	13.97	171.62	226.43	210
	Total	971.62	20.00	932.39	1010.85	956
% of Total	Strongly agree	3.83%	0.67%	2.71%	5.37%	3.77%
	Agree	36.41%	1.72%	33.10%	39.85%	34.83%
	Neither agree nor disagree	13.39%	1.19%	11.23%	15.90%	13.91%
	Disagree	18.29%	1.38%	15.74%	21.15%	17.78%
	Strongly disagree	7.60%	0.92%	5.98%	9.61%	7.74%
	Don't know	20.48%	1.40%	17.88%	23.36%	21.97%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 20: Do you agree or disagree that autism is caused by vaccines like MMR?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Strongly agree	7.65	3.36	1.05	14.26	6
	Agree	62.33	8.94	44.79	79.88	60
	Neither agree nor disagree	165.67	13.56	139.06	192.28	158
	Disagree	290.34	16.81	257.35	323.33	287
	Strongly disagree	191.92	13.72	165.01	218.83	194
	Don't know	252.61	16.05	221.13	284.10	250
	Total	970.53	20.01	931.27	1009.79	955
% of Total	Strongly agree	0.79%	0.35%	0.33%	1.86%	0.63%
	Agree	6.42%	0.91%	4.86%	8.45%	6.28%
	Neither agree nor disagree	17.07%	1.35%	14.59%	19.88%	16.54%
	Disagree	29.92%	1.62%	26.83%	33.19%	30.05%
	Strongly disagree	19.77%	1.38%	17.21%	22.61%	20.31%
	Don't know	26.03%	1.56%	23.09%	29.20%	26.18%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix21: Do you agree or disagree that autism is caused by something in the environment?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Strongly agree	9.30	3.41	2.61	15.98	8
	Agree	54.13	7.94	38.55	69.71	52
	Neither agree nor disagree	136.69	12.71	111.75	161.63	127
	Disagree	369.07	18.65	332.48	405.67	355
	Strongly disagree	200.12	13.63	173.38	226.86	215
	Don't know	202.31	14.70	173.46	231.15	199
	Total	971.62	20.00	932.39	1010.85	956
% of Total	Strongly agree	0.96%	0.35%	0.47%	1.95%	0.84%
	Agree	5.57%	0.81%	4.18%	7.39%	5.44%
	Neither agree nor disagree	14.07%	1.26%	11.77%	16.73%	13.28%
	Disagree	37.99%	1.73%	34.66%	41.43%	37.13%
	Strongly disagree	20.60%	1.38%	18.03%	23.43%	22.49%
	Don't know	20.82%	1.45%	18.13%	23.80%	20.82%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 22: Do you agree or disagree that autism is caused by poor parenting skills?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Strongly agree	2.73	1.97	-1.13	6.60	2
	Agree	30.07	6.34	17.63	42.52	29
	Neither agree nor disagree	43.20	7.46	28.57	57.82	42
	Disagree	269.01	16.12	237.38	300.65	265
	Strongly disagree	545.68	20.82	504.83	586.53	525
	Don't know	79.28	8.57	62.47	96.10	92
	Total	969.98	19.99	930.75	1009.21	955
% of Total	Strongly agree	0.28%	0.20%	0.07%	1.15%	0.21%
	Agree	3.10%	0.65%	2.05%	4.66%	3.04%
	Neither agree nor disagree	4.45%	0.76%	3.18%	6.21%	4.40%
	Disagree	27.73%	1.58%	24.75%	30.93%	27.75%
	Strongly disagree	56.26%	1.75%	52.79%	59.66%	54.97%
	Don't know	8.17%	0.89%	6.60%	10.09%	9.63%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 23: Do you think people with autism have a type of learning disability?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Definitely	292.52	16.66	259.85	325.20	289
	Probably	489.36	19.80	450.53	528.20	484
	Probably not	64.52	8.76	47.33	81.71	63
	Definitely not	50.85	8.92	33.35	68.35	40
	Don't know	73.81	8.85	56.45	91.18	79
	Total	971.07	20.01	931.81	1010.33	955
% of Total	Definitely	30.12%	1.62%	27.05%	33.38%	30.26%
	Probably	50.39%	1.77%	46.92%	53.86%	50.68%
	Probably not	6.64%	0.89%	5.10%	8.62%	6.60%
	Definitely not	5.24%	0.90%	3.73%	7.31%	4.19%
	Don't know	7.60%	0.90%	6.01%	9.58%	8.27%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 24: Do you think people with autism have a mental illness?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Definitely	44.29	6.82	30.90	57.67	48
	Probably	291.43	16.98	258.13	324.74	285
	Probably not	244.96	15.94	213.68	276.23	238
	Definitely not	272.29	16.90	239.15	305.44	253
	Don't know	118.65	10.72	97.62	139.68	132
	Total	971.62	20.00	932.39	1010.85	956
% of Total	Definitely	4.56%	0.70%	3.37%	6.15%	5.02%
	Probably	29.99%	1.63%	26.90%	33.28%	29.81%
	Probably not	25.21%	1.55%	22.30%	28.37%	24.90%
	Definitely not	28.02%	1.61%	24.97%	31.30%	26.46%
	Don't know	12.21%	1.10%	10.22%	14.53%	13.81%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 25: Do you think people with autism have a behavioural problem?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Definitely	249.88	15.19	220.07	279.69	260
	Probably	480.62	19.76	441.84	519.39	470
	Probably not	100.61	11.34	78.36	122.86	89
	Definitely not	65.61	9.69	46.59	84.63	59
	Don't know	74.91	8.94	57.36	92.46	78
	Total	971.62	20.00	932.39	1010.85	956
% of Total	Definitely	25.72%	1.51%	22.87%	28.79%	27.20%
	Probably	49.47%	1.77%	46.00%	52.94%	49.16%
	Probably not	10.35%	1.13%	8.33%	12.80%	9.31%
	Definitely not	6.75%	0.98%	5.07%	8.94%	6.17%
	Don't know	7.71%	0.91%	6.10%	9.70%	8.16%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 26: Do you think people with autism have special abilities, for example in maths, music, art?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Definitely	419.92	19.20	382.25	457.59	407
	Probably	394.23	18.85	357.25	431.20	380
	Probably not	37.18	7.66	22.15	52.21	32
	Definitely not	5.47	2.32	0.93	10.01	6
	Don't know	113.73	10.38	93.37	134.09	130
	Total	970.53	20.01	931.27	1009.79	955
% of Total	Definitely	43.27%	1.76%	39.86%	46.74%	42.62%
	Probably	40.62%	1.74%	37.25%	44.08%	39.79%
	Probably not	3.83%	0.78%	2.57%	5.69%	3.35%
	Definitely not	0.56%	0.24%	0.25%	1.29%	0.63%
	Don't know	11.72%	1.07%	9.78%	13.98%	13.61%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 27: Do you agree or disagree there are drug treatments that are effective in helping people with autism?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Strongly agree	45.93	7.05	32.10	59.76	47
	Agree	436.87	19.47	398.68	475.07	424
	Neither agree nor disagree	114.82	11.47	92.33	137.32	110
	Disagree	94.05	10.40	73.64	114.45	91
	Strongly disagree	23.51	5.78	12.18	34.84	24
	Don't know	250.42	15.62	219.77	281.08	254
	Total	965.61	20.05	926.27	1004.94	950
% of Total	Strongly agree	4.76%	0.73%	3.52%	6.40%	4.95%
	Agree	45.24%	1.77%	41.80%	48.73%	44.63%
	Neither agree nor disagree	11.89%	1.16%	9.80%	14.36%	11.58%
	Disagree	9.74%	1.06%	7.85%	12.02%	9.58%
	Strongly disagree	2.43%	0.59%	1.51%	3.92%	2.53%
	Don't know	25.93%	1.54%	23.03%	29.07%	26.74%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 28: Do you agree or disagree there are behavioural interventions that are effective in helping people with autism?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Strongly agree	127.95	12.26	103.89	152.00	120
	Agree	618.95	21.13	577.50	660.40	596
	Neither agree nor disagree	54.13	7.94	38.55	69.71	54
	Disagree	21.87	5.32	11.43	32.31	23
	Strongly disagree	12.03	3.77	4.63	19.43	12
	Don't know	133.96	11.41	111.57	156.35	147
	Total	968.89	20.05	929.54	1008.23	952
% of Total	Strongly agree	13.21%	1.23%	10.98%	15.80%	12.61%
	Agree	63.88%	1.70%	60.49%	67.14%	62.61%
	Neither agree nor disagree	5.59%	0.81%	4.19%	7.41%	5.67%
	Disagree	2.26%	0.55%	1.40%	3.62%	2.42%
	Strongly disagree	1.24%	0.39%	0.67%	2.29%	1.26%
	Don't know	13.83%	1.17%	11.69%	16.28%	15.44%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 29: Do you agree or disagree there are other non-drug related therapies and supports that are effective in helping people with autism?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Strongly agree	147.08	12.70	122.17	172.00	145
	Agree	567.01	20.74	526.31	607.70	547
	Neither agree nor disagree	69.44	9.15	51.50	87.39	66
	Disagree	34.45	6.74	21.23	47.67	33
	Strongly disagree	7.65	2.99	1.79	13.52	8
	Don't know	143.26	12.07	119.57	166.94	153
	Total	968.89	20.05	929.54	1008.23	952
% of Total	Strongly agree	15.18%	1.27%	12.85%	17.85%	15.23%
	Agree	58.52%	1.75%	55.06%	61.90%	57.46%
	Neither agree nor disagree	7.17%	0.93%	5.54%	9.22%	6.93%
	Disagree	3.56%	0.69%	2.42%	5.18%	3.47%
	Strongly disagree	0.79%	0.31%	0.37%	1.69%	0.84%
	Don't know	14.79%	1.22%	12.54%	17.35%	16.07%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 30: Do you agree or disagree there is nothing that can help with autism?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Strongly agree	4.37	2.68	-0.88	9.63	3
	Agree	33.90	6.26	21.63	46.17	34
	Neither agree nor disagree	56.86	8.84	39.53	74.20	53
	Disagree	399.15	19.16	361.55	436.74	381
	Strongly disagree	375.63	18.20	339.93	411.34	374
	Don't know	98.97	9.90	79.54	118.40	107
	Total	968.89	20.05	929.54	1008.23	952
% of Total	Strongly agree	0.45%	0.28%	0.14%	1.49%	0.32%
	Agree	3.50%	0.64%	2.44%	5.00%	3.57%
	Neither agree nor disagree	5.87%	0.90%	4.34%	7.89%	5.57%
	Disagree	41.20%	1.75%	37.80%	44.67%	40.02%
	Strongly disagree	38.77%	1.72%	35.45%	42.20%	39.29%
	Don't know	10.21%	1.02%	8.39%	12.39%	11.24%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 31: Do you agree or disagree people with autism do not need help?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Strongly agree	9.30	3.22	2.97	15.62	9
	Agree	25.70	5.22	15.45	35.95	26
	Neither agree nor disagree	33.35	6.47	20.66	46.05	33
	Disagree	321.50	17.90	286.39	356.62	308
	Strongly disagree	499.75	20.02	460.47	539.04	491
	Don't know	79.28	9.01	61.60	96.97	85
	Total	968.89	20.05	929.54	1008.23	952
% of Total	Strongly agree	0.96%	0.33%	0.49%	1.89%	0.95%
	Agree	2.65%	0.54%	1.78%	3.94%	2.73%
	Neither agree nor disagree	3.44%	0.66%	2.35%	5.01%	3.47%
	Disagree	33.18%	1.69%	29.96%	36.57%	32.35%
	Strongly disagree	51.58%	1.77%	48.10%	55.05%	51.58%
	Don't know	8.18%	0.92%	6.54%	10.19%	8.93%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 32: Do you think people with autism can work as a Member of Parliament or Assembly?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Yes	204.49	15.06	174.95	234.04	191
	Yes, but only if they are high functioning	391.49	18.73	354.75	428.23	389
	No	273.39	16.41	241.19	305.59	268
	Don't know	98.97	10.14	79.07	118.86	103
	Total	968.34	20.07	928.97	1007.71	951
% of Total	Yes	21.12%	1.47%	18.37%	24.15%	20.08%
	Yes, but only if they are high functioning	40.43%	1.74%	37.06%	43.89%	40.90%
	No	28.23%	1.60%	25.21%	31.46%	28.18%
	Don't know	10.22%	1.04%	8.36%	12.44%	10.83%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 33: Do you think people with autism can work as a computer programmer?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Yes	421.56	19.15	384.00	459.13	410
	Yes, but only if they are high functioning	385.48	18.86	348.48	422.47	377
	No	82.56	10.00	62.95	102.18	78
	Don't know	78.74	8.83	61.41	96.07	86
	Total	968.34	20.07	928.97	1007.71	951
% of Total	Yes	43.53%	1.76%	40.12%	47.01%	43.11%
	Yes, but only if they are high functioning	39.81%	1.74%	36.44%	43.27%	39.64%
	No	8.53%	1.01%	6.74%	10.73%	8.20%
	Don't know	8.13%	0.91%	6.52%	10.10%	9.04%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 34: Do you think people with autism can work as an artist/musician?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Yes	656.131	21.312	614.318	697.944	632
	Yes, but only if they are high functioning	218.710	14.991	189.298	248.122	218
	No	21.871	5.092	11.880	31.862	25
	Don't know	71.628	8.662	54.634	88.621	76
	Total	968.340	20.068	928.967	1007.712	951
% of Total	Yes	67.76%	1.65%	64.45%	70.90%	66.46%
	Yes, but only if they are high functioning	22.59%	1.48%	19.82%	25.62%	22.92%
	No	2.26%	0.52%	1.43%	3.55%	2.63%
	Don't know	7.40%	0.89%	5.83%	9.34%	7.99%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 35: Do you think people with autism can work as a waiter or waitress?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Yes	385.48	18.45	349.27	421.68	375
	Yes, but only if they are high functioning	230.74	15.43	200.46	261.02	226
	No	262.45	16.67	229.75	295.16	255
	Don't know	89.67	9.69	70.66	108.68	95
	Total	968.34	20.07	928.97	1007.71	951
% of Total	Yes	39.81%	1.73%	36.46%	43.25%	39.43%
	Yes, but only if they are high functioning	23.83%	1.51%	20.99%	26.92%	23.76%
	No	27.10%	1.60%	24.08%	30.36%	26.81%
	Don't know	9.26%	0.99%	7.49%	11.40%	9.99%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 36: Do you think people with autism can work as a doctor?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Yes	118.10	11.57	95.41	140.80	114
	Yes, but only if they are high functioning	290.34	16.58	257.81	322.87	288
	No	450.54	20.04	411.23	489.86	435
	Don't know	109.36	10.56	88.63	130.08	114
	Total	968.34	20.07	928.97	1007.71	951
% of Total	Yes	12.20%	1.17%	10.09%	14.68%	11.99%
	Yes, but only if they are high functioning	29.98%	1.61%	26.91%	33.24%	30.28%
	No	46.53%	1.78%	43.07%	50.02%	45.74%
	Don't know	11.29%	1.08%	9.34%	13.59%	11.99%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 37: Do you think people with autism can stack shelves in a supermarket?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Yes	667.61	21.23	625.96	709.27	649
	Yes, but only if they are high functioning	150.91	13.07	125.27	176.55	147
	No	75.46	9.29	57.24	93.67	76
	Don't know	74.36	8.69	57.30	91.42	79
	Total	968.34	20.07	928.97	1007.71	951
% of Total	Yes	68.94%	1.64%	65.65%	72.06%	68.24%
	Yes, but only if they are high functioning	15.58%	1.30%	13.19%	18.32%	15.46%
	No	7.79%	0.95%	6.13%	9.86%	7.99%
	Don't know	7.68%	0.89%	6.10%	9.63%	8.31%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 38: Do you think people with autism can work as a lawyer?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Yes	147.63	12.85	122.43	172.83	140
	Yes, but only if they are high functioning	338.45	17.46	304.20	372.71	338
	No	374.54	19.02	337.22	411.86	361
	Don't know	107.71	10.53	87.05	128.38	112
	Total	968.34	20.07	928.97	1007.71	951
% of Total	Yes	15.25%	1.28%	12.89%	17.94%	14.72%
	Yes, but only if they are high functioning	34.95%	1.68%	31.73%	38.32%	35.54%
	No	38.68%	1.74%	35.32%	42.15%	37.96%
	Don't know	11.12%	1.08%	9.18%	13.41%	11.78%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 39: Do you think people with autism can work as a labourer on a building site?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Yes	489.36	19.58	450.94	527.79	483
	Yes, but only if they are high functioning	202.31	15.20	172.48	232.13	189
	No	189.73	14.46	161.36	218.10	188
	Don't know	86.94	9.44	68.41	105.46	91
	Total	968.34	20.07	928.97	1007.71	951
% of Total	Yes	50.54%	1.78%	47.06%	54.01%	50.79%
	Yes, but only if they are high functioning	20.89%	1.48%	18.13%	23.95%	19.87%
	No	19.59%	1.43%	16.95%	22.54%	19.77%
	Don't know	8.98%	0.97%	7.25%	11.07%	9.57%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 40: Do you think people with autism can work in sheltered employment in a day centre?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Yes	680.19	21.26	638.48	721.90	662
	Yes, but only if they are high functioning	135.05	12.31	110.91	159.20	132
	No	77.10	9.48	58.49	95.70	77
	Don't know	76.00	8.90	58.53	93.47	80
	Total	968.34	20.07	928.97	1007.71	951
% of Total	Yes	70.24%	1.62%	66.98%	73.31%	69.61%
	Yes, but only if they are high functioning	13.95%	1.24%	11.69%	16.55%	13.88%
	No	7.96%	0.96%	6.26%	10.07%	8.10%
	Don't know	7.85%	0.91%	6.23%	9.84%	8.41%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 41: Would you personally feel comfortable or uncomfortable if an adult with autism moved in next door on their own?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Comfortable	803.21	20.86	762.28	844.14	796
	Comfortable, but only if they were high functioning	114.82	11.90	91.47	138.17	104
	Uncomfortable	24.60	5.23	14.35	34.86	25
	Don't know	21.32	4.76	11.98	30.66	23
	Total	963.97	20.06	924.60	1003.33	948
% of Total	Comfortable	83.32%	1.35%	80.51%	85.80%	83.97%
	Comfortable, but only if they were high functioning	11.91%	1.20%	9.76%	14.46%	10.97%
	Uncomfortable	2.55%	0.54%	1.68%	3.86%	2.64%
	Don't know	2.21%	0.49%	1.43%	3.42%	2.43%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 42: Would you personally feel comfortable or uncomfortable if one of your close relatives married someone with autism?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Comfortable	775.87	21.15	734.39	817.36	763
	Comfortable, but only if they were high functioning	98.97	10.83	77.72	120.21	93
	Uncomfortable	44.29	6.87	30.82	57.76	47
	Don't know	44.84	7.18	30.74	58.93	45
	Total	963.97	20.06	924.60	1003.33	948
% of Total	Comfortable	80.49%	1.40%	77.58%	83.10%	80.49%
	Comfortable, but only if they were high functioning	10.27%	1.10%	8.30%	12.63%	9.81%
	Uncomfortable	4.59%	0.71%	3.39%	6.21%	4.96%
	Don't know	4.65%	0.74%	3.40%	6.34%	4.75%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 43: Would you personally feel comfortable or uncomfortable if an adult with autism was appointed as your boss?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Comfortable	684.02	20.91	642.99	725.04	676
	Comfortable, but only if they were high functioning	160.75	13.88	133.51	187.99	148
	Uncomfortable	80.38	9.24	62.26	98.50	84
	Don't know	37.18	6.34	24.75	49.61	39
	Total	962.33	20.06	922.96	1001.69	947
% of Total	Comfortable	71.08%	1.62%	67.79%	74.16%	71.38%
	Comfortable, but only if they were high functioning	16.70%	1.38%	14.18%	19.58%	15.63%
	Uncomfortable	8.35%	0.95%	6.67%	10.42%	8.87%
	Don't know	3.86%	0.66%	2.76%	5.38%	4.12%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 44: Would you personally feel comfortable or uncomfortable if an adult with autism was appointed as your colleague?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Comfortable	776.42	21.18	734.87	817.98	763
	Comfortable, but only if they were high functioning	127.95	12.16	104.08	151.81	121
	Uncomfortable	27.89	5.27	17.55	38.23	31
	Don't know	30.07	5.64	19.00	41.15	32
	Total	962.33	20.06	922.96	1001.69	947
% of Total	Comfortable	80.68%	1.40%	77.80%	83.27%	80.57%
	Comfortable, but only if they were high functioning	13.30%	1.23%	11.07%	15.89%	12.78%
	Uncomfortable	2.90%	0.55%	2.00%	4.19%	3.27%
	Don't know	3.13%	0.59%	2.16%	4.50%	3.38%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 45: Would you be comfortable or uncomfortable if a family who had a child with autism moved in next door?

		Estimate	Standard Error	95% Confidence Interval		Unweighted Count
				Lower	Upper	
Frequency	Comfortable	897.81	20.73	857.13	938.48	880
	Comfortable, but only if they were high functioning	34.45	6.03	22.61	46.29	37
	Uncomfortable	12.03	3.61	4.94	19.12	13
	Don't know	19.68	4.92	10.03	29.34	18
	Total	963.97	20.06	924.60	1003.33	948
% of Total	Comfortable	93.14%	0.87%	91.22%	94.66%	92.83%
	Comfortable, but only if they were high functioning	3.57%	0.62%	2.53%	5.02%	3.90%
	Uncomfortable	1.25%	0.37%	0.69%	2.24%	1.37%
	Don't know	2.04%	0.51%	1.25%	3.32%	1.90%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 46: Would you be comfortable or uncomfortable if a child with autism was in class with a child from your own family?

		Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Comfortable	885.23	20.80	844.42	926.04	867
	Comfortable, but only if they were high functioning	40.46	6.78	27.17	53.76	42
	Uncomfortable	14.22	4.00	6.37	22.06	15
	Don't know	24.06	5.20	13.85	34.26	24
	Total	963.97	20.06	924.60	1003.33	948
% of Total	Comfortable	91.83%	0.95%	89.76%	93.51%	91.46%
	Comfortable, but only if they were high functioning	4.20%	0.70%	3.02%	5.80%	4.43%
	Uncomfortable	1.47%	0.41%	0.85%	2.55%	1.58%
	Don't know	2.50%	0.54%	1.63%	3.80%	2.53%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 47: If a supermarket employed people who have autism would you be...

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	More likely to shop there	115.92	11.09	94.17	137.66	121
	Less likely to shop there	1.64	0.95	-0.22	3.50	3
	It would make no difference	833.29	21.16	791.76	874.81	810
	(Other answer- write in)	0.55	0.55	-0.53	1.62	1
	Don't know	12.58	3.81	5.10	20.05	13
	Total	963.97	20.06	924.60	1003.33	948
% of Total	More likely to shop there	12.02%	1.13%	9.98%	14.43%	12.76%
	Less likely to shop there	0.17%	0.10%	0.05%	0.53%	0.32%
	It would make no difference	86.44%	1.19%	83.94%	88.61%	85.44%
	(Other answer- write in)	0.06%	0.06%	0.01%	0.40%	0.11%
	Don't know	1.30%	0.39%	0.72%	2.36%	1.37%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 48: Do you agree or disagree autism is a life-long disability and you can do nothing about it?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Strongly agree	35.54	6.51	22.77	48.31	34
	Agree	174.42	13.67	147.60	201.24	171
	Neither agree nor disagree	115.37	11.37	93.06	137.68	111
	Disagree	422.11	19.56	383.73	460.49	405
	Strongly disagree	135.60	11.69	112.66	158.54	144
	Don't know	79.28	9.40	60.83	97.73	82
	Total	962.33	20.06	922.96	1001.69	947
% of Total	Strongly agree	3.69%	0.67%	2.58%	5.26%	3.59%
	Agree	18.13%	1.37%	15.59%	20.97%	18.06%
	Neither agree nor disagree	11.99%	1.15%	9.90%	14.45%	11.72%
	Disagree	43.86%	1.77%	40.42%	47.36%	42.77%
	Strongly disagree	14.09%	1.20%	11.90%	16.60%	15.21%
	Don't know	8.24%	0.96%	6.53%	10.34%	8.66%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 49: Do you agree or disagree when someone has autism their own choices are not respected enough?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Strongly agree	55.77	7.91	40.24	71.30	55
	Agree	507.41	20.46	467.27	547.54	493
	Neither agree nor disagree	163.49	13.20	137.58	189.39	159
	Disagree	102.25	11.08	80.52	123.98	98
	Strongly disagree	11.48	3.74	4.15	18.81	11
	Don't know	122.48	11.03	100.84	144.11	131
	Total	962.87	20.08	923.48	1002.26	947
% of Total	Strongly agree	5.79%	0.82%	4.39%	7.61%	5.81%
	Agree	52.70%	1.77%	49.21%	56.16%	52.06%
	Neither agree nor disagree	16.98%	1.33%	14.53%	19.75%	16.79%
	Disagree	10.62%	1.12%	8.61%	13.03%	10.35%
	Strongly disagree	1.19%	0.39%	0.63%	2.25%	1.16%
	Don't know	12.72%	1.13%	10.66%	15.11%	13.83%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 50: Do you agree or disagree it is better for people with severe autism and their families if they are cared for in a residential unit?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Strongly agree	6.01	2.50	1.11	10.92	7
	Agree	104.98	10.40	84.58	125.38	111
	Neither agree nor disagree	126.85	11.67	103.95	149.75	129
	Disagree	398.05	19.38	360.02	436.08	374
	Strongly disagree	219.80	15.00	190.38	249.23	218
	Don't know	107.17	10.91	85.76	128.58	107
	Total	962.87	20.09	923.45	1002.29	946
% of Total	Strongly agree	0.62%	0.26%	0.28%	1.41%	0.74%
	Agree	10.90%	1.07%	8.98%	13.18%	11.73%
	Neither agree nor disagree	13.17%	1.19%	11.02%	15.68%	13.64%
	Disagree	41.34%	1.76%	37.93%	44.84%	39.53%
	Strongly disagree	22.83%	1.49%	20.04%	25.88%	23.04%
	Don't know	11.13%	1.11%	9.13%	13.50%	11.31%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 51: Do you agree or disagree it is better for the family of someone with autism if the person is cared for in a residential unit?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Strongly agree	6.01	2.73	0.66	11.37	6
	Agree	97.87	10.09	78.07	117.67	102
	Neither agree nor disagree	156.38	12.76	131.35	181.41	156
	Disagree	378.92	19.32	341.00	416.83	354
	Strongly disagree	220.90	15.02	191.42	250.37	220
	Don't know	103.34	10.31	83.11	123.57	109
	Total	963.42	20.08	924.03	1002.81	947
% of Total	Strongly agree	0.62%	0.28%	0.26%	1.51%	0.63%
	Agree	10.16%	1.04%	8.30%	12.38%	10.77%
	Neither agree nor disagree	16.23%	1.29%	13.86%	18.93%	16.47%
	Disagree	39.33%	1.76%	35.94%	42.83%	37.38%
	Strongly disagree	22.93%	1.49%	20.14%	25.98%	23.23%
	Don't know	10.73%	1.06%	8.82%	12.99%	11.51%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 52: Should an adult with high functioning autism be encouraged to live independently?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Definitely	443.98	19.37	405.97	481.99	441
	Probably	303.46	17.26	269.61	337.32	295
	It depends	148.18	12.94	122.78	173.57	139
	Probably not	18.59	4.48	9.80	27.38	20
	Definitely not	7.11	3.41	0.42	13.80	6
	Don't know	41.55	6.41	28.98	54.13	46
	Total	962.87	20.08	923.48	1002.26	947
% of Total	Definitely	46.11%	1.77%	42.66%	49.60%	46.57%
	Probably	31.52%	1.66%	28.36%	34.86%	31.15%
	It depends	15.39%	1.30%	13.01%	18.11%	14.68%
	Probably not	1.93%	0.46%	1.20%	3.09%	2.11%
	Definitely not	0.74%	0.35%	0.29%	1.88%	0.63%
	Don't know	4.32%	0.67%	3.18%	5.83%	4.86%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 53: Should an adult with high functioning autism be allowed to drive if they pass the specialist disability tests?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	Definitely	474.60	19.82	435.73	513.48	470
	Probably	323.69	18.17	288.05	359.33	299
	It depends	80.38	8.97	62.77	97.98	88
	Probably not	25.15	5.25	14.84	35.46	27
	Definitely not	11.48	3.74	4.15	18.81	11
	Don't know	47.57	6.85	34.13	61.00	52
	Total	962.87	20.08	923.48	1002.26	947
% of Total	Definitely	49.29%	1.78%	45.81%	52.78%	49.63%
	Probably	33.62%	1.70%	30.36%	37.04%	31.57%
	It depends	8.35%	0.93%	6.70%	10.36%	9.29%
	Probably not	2.61%	0.54%	1.73%	3.92%	2.85%
	Definitely not	1.19%	0.39%	0.63%	2.25%	1.16%
	Don't know	4.94%	0.71%	3.72%	6.54%	5.49%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%

Appendix 54: Do you think that a child with autism has an educational problem or a health problem?

		Weighted Estimate	Standard Error	95% Confidence Interval		Unweighted Figures
				Lower	Upper	
Frequency	An educational problem	248.24	16.23	216.39	280.09	231
	A health problem	313.30	17.23	279.50	347.11	313
	(Both)	272.29	15.97	240.97	303.62	278
	(Neither)	25.70	5.97	13.98	37.41	22
	Don't know	103.34	10.90	81.95	124.73	103
	Total	962.87	20.08	923.48	1002.26	947
% of Total	An educational problem	25.78%	1.58%	22.81%	28.99%	24.39%
	A health problem	32.54%	1.66%	29.36%	35.88%	33.05%
	(Both)	28.28%	1.58%	25.29%	31.48%	29.36%
	(Neither)	2.67%	0.62%	1.69%	4.18%	2.32%
	Don't know	10.73%	1.11%	8.74%	13.11%	10.88%
	Total	100.00%	0.00%	100.00%	100.00%	100.00%